

UTAH RETIREMENT SYSTEMS  
*ACTUARIAL VALUATION REPORT*  
*AS OF JANUARY 1, 2009*

September 30, 2009

Utah State Retirement Board  
540 East 200 South  
Salt Lake City, UT 84102

Dear Members of the Board:

**Subject: Actuarial Valuation as of January 1, 2009**

This report describes the current actuarial condition of the Utah Retirement Systems (URS), determines the calculated employer contribution rates, and analyzes changes in these contribution rates. Valuations are prepared annually, as of January 1, the first day of the URS plan year.

Under URS statutes, the Board of Trustees must certify employer contribution rates annually. These rates are determined actuarially, based on the Board's funding policy, although, as discussed below, under certain circumstances the Board may choose not to reduce the current rate if it is greater than the actuarially calculated rate. Contribution rates determined by a given actuarial valuation become effective eighteen months after the valuation date. I.e., the rates determined by this January 1, 2009 actuarial valuation will be used by the Board when certifying the employer contribution rates for the year beginning July 1, 2010 and ending June 30, 2011. If new legislation is enacted between the valuation date and the date the contribution rates become effective, the Board may adjust the calculated rates before certifying them, in order to reflect this new legislation. Such adjustments are based on information supplied by the actuary.

**FINANCING OBJECTIVES AND FUNDING POLICY**

In setting contribution rates in the past, the Board's principal objectives have been:

- To set rates so that the unfunded actuarial accrued liability (UAAL) will be amortized over a 20-year period from the current valuation date
- To set rates so that they remain relatively level over time.

To accomplish this, the Board's funding policy required that the employer contribution rate be at least equal to the sum of the employer normal cost rate (which pays the current year's cost) and an amortization rate which results in the amortization of the UAAL over twenty years in installments which increase at the assumed rate of growth in payroll for URS. The current assumed rate of growth in payroll for URS is 4.00%.

Under this policy, the objective of maintaining a relatively level contribution rate over time is achieved in normal conditions such as consistent financial markets.

However, the very large investment loss experienced in 2008 would have driven the employer contributions rates much higher. Further, under current methods, much of the increase would have been recognized in this valuation, rather than being smoothed in uniformly over the next five years. As a result, the Board made two decisions to reduce the impact of the large investment losses in 2008 on this year's contribution rates. The first change was to increase the amortization period for amortizing the UAAL from 20 years to 25 years. This funding period will be closed (i.e. the funding period will decrease by one each year) until the funding period reaches 20 years, at which time the period will once again revert to an open 20-year amortization period.

The second change adopted by the Board was to widen the corridor used in the determination of the actuarial value of assets from 80% - 120% of market value to 75% - 125% of market value. This change allows more of the 2008 investment losses to be smoothed into the actuarial value of assets rather than being recognized in this valuation. The portion of the 2008 asset loss not recognized in this valuation will be recognized over the next four valuations.

In 2004, the Utah Legislature added Section 49-11-301(5) to the Utah Code. This section allows the Board to set the employer contribution rate at the prior year's rate, if the rate otherwise would decrease and if the funded ratio is less than 110%. In such a case, the rate set by the Board would be higher than the actuarially determined contribution rate. The purpose of this legislation is to enhance the Board's ability to maintain more-level contribution rates while targeting a 100% - 110% funded level. The Board has followed this policy since 2004, so the recommended contribution rate may be greater than the actuarially determined rate.

However, the employer contribution rates actuarially determined by this valuation are larger than the prior year's contribution rates for each of the funds other than Public Safety Salt Lake City and the 3% Substantial Substitute.

#### **PROGRESS TOWARD REALIZATION OF FINANCING OBJECTIVES**

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a plan's funded status. In the absence of benefit improvements, it should increase over time, until it reaches at least 100%.

For all systems combined, the funded ratio decreased from 95.1% to 86.6%. This decrease was due to the -23.4% asset return in 2008. If market value had been used in the calculation instead of actuarial value, the aggregate funded ratio for all funds combined would have been 69.3%, compared to 98.3% in the prior year.

The -23.4% market return for 2008 has cost the plan almost one-third of the anticipated assets as of this valuation. The actual return must be compared to the expected return of 7.75%, so the total shortfall is over 31% ( $-23.4\% - 7.75\% = -31.15\%$ ). The expected value of assets (assuming

a 7.75% net return on market value) as of Dec. 31, 2008 was about \$22.4 billion, while the actual market value at that date is \$15.9 billion, so the shortfall amounts to \$6.5 billion.

Note that not all of this loss in 2008 is currently recognized in the actuarial value of assets. The actuarial value of assets is based on a five-year smoothing period (recognizing 20% of the difference between the actual and expected market returns each year), subject to the requirement that the actuarial value can never exceed 125% of the market value, or be less than 75% of the market value. This corridor restricts the actuarial value of assets in this year's valuation to 125% of the market value of assets. As more of the 2008 is recognized over the next four years, we expect the funded ratio to slide further, absent a recovery or other changes to the plan.

The increases in the employer contribution rates shown herein are primarily due to the 2008 investment results.

#### **BENEFIT PROVISIONS**

The benefit provisions reflected in this valuation are those which were in effect on January 1, 2009, or which were adopted by the end of the 2009 legislative session and are effective on or before July 1, 2010, except as discussed in the following paragraphs.

SB19 was passed during the 2008 legislative session. This law opened a window to allow employers of the Public Safety Retirement Systems to adopt a 4% maximum COLA in lieu of the current 2.5% maximum COLA. However, adoption of the 4% maximum COLA is mandatory for the State of Utah. This window was originally scheduled to close in December 2009, but was extended by 2009 legislation until December 2012. For those employers making the election during calendar year 2008, including the State of Utah, the 4% maximum COLA is effective January 1, 2009. For employers making the election in calendar year 2009 or later, the 4% maximum COLA will be effective at the following January 1<sup>st</sup>. This legislation was reflected in the valuation only for those units that made the election by December 31, 2008, including the State of Utah. Supplemental information will be provided to URS so that URS can adjust the contribution rates for employers electing the 4% COLA during 2009 or later.

HB21 was enacted by the 2007 legislature. This bill created a window allowing members and employers of the Public Safety Contributory Retirement System to transfer to the Public Safety Noncontributory Retirement System. All transfers are now reflected in this valuation. As a result, a significant portion of the membership in the Public Safety Contributory Retirement System transferred to the noncontributory system during 2007 or 2008. The active membership of the Public Safety Contributory Retirement System decreased from 693 at Jan. 1, 2007 to 188 as of this valuation. All of the members of the Provo public safety fund transferred to the noncontributory fund in 2008.

No other legislation has been enacted since the last valuation that materially affects the benefits or contributions of URS.

#### **ASSUMPTIONS AND METHODS**

The Board, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. Current Board policy is to perform an experience study every three years. In connection with the appropriate valuation, the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board.

As noted above, there were two changes in actuarial methods since the prior valuation. The funding period for the UAAL was increased from 20 years to 25 years. Also, the corridor used to calculate the actuarial value of assets was widened from a span of 80% to 120% of the market value of assets to a span of 75% to 125% of the market value. Expanding the corridor decreased the UAAL, while the extension of the funding period lowered the amortization payment on the new UAAL. Otherwise, the current actuarial assumptions and methods are the same as used for the prior valuation. Except as noted above, the assumptions and methods were adopted effective January 1, 2008. The assumptions adopted were the ones recommended by the actuary. The next experience analysis is scheduled for 2011.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates and funding periods.

It is our opinion that the recommended assumptions are internally consistent and are reasonably based on past and anticipated future experience of the System. The actuarial assumptions and methods used in this report comply with the parameters for disclosure that appear in GASB 25.

#### **DATA**

Member data for retired, active and inactive members was supplied as of December 31, 2008 by the URS staff. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data. The staff also supplied asset information as of December 31, 2008.

#### **CERTIFICATION**

We certify that the information presented herein is accurate and fairly portrays the actuarial position of URS as of January 1, 2009.

All of our work conforms with generally accepted actuarial principles and practices and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Utah state law and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

The undersigned are independent actuaries and consultants. Mr. Conradi is an Enrolled Actuary and a Member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries. Both are experienced in performing valuations for large public retirement systems.

Sincerely,



Lewis Ward

Consultant



J. Christian Conradi, ASA, EA, MAAA

Senior Consultant

3012\2009\Val\2009\_val.doc

	<b>Page</b>
<b>COVER LETTER</b>	
<b>SECTION I EXECUTIVE SUMMARY</b>	
EXECUTIVE SUMMARY AND CONTRIBUTION REQUIREMENTS .....	2
<b>SECTION II DISCUSSION</b>	
DETERMINATION OF CALCULATED CONTRIBUTION RATES .....	7
FINANCIAL DATA AND EXPERIENCE .....	9
MEMBER DATA .....	11
BENEFIT PROVISIONS .....	12
ACTUARIAL METHODS AND ASSUMPTIONS .....	13
GASB 25 AND FUNDING PROGRESS .....	14
GOVERNORS AND LEGISLATIVE PLAN .....	15
FIREFIGHTERS AND JUDGES OFFSETS .....	16
3% SUBSTANTIAL SUBSTITUTE .....	17
RESTORATION OF PURCHASING POWER (ROPP) .....	18
PUBLIC SAFETY RETIREES' COST-OF-LIVING INCREASES RESTRICTED ACCOUNT .....	19
<b>SECTION III SUPPORTING EXHIBITS</b>	
EXHIBIT 1(A) — COMPARISON OF RECOMMENDED CONTRIBUTION RATES	21
EXHIBIT 1(B) — DEVELOPMENT OF RECOMMENDED CONTRIBUTION RATES	22
EXHIBIT 1(C) — ESTIMATED FISCAL YEAR CONTRIBUTION REQUIREMENTS	23
EXHIBIT 2(A) — COMPONENTS OF ACTUARIALLY CALCULATED CONTRIBUTION RATES	24
EXHIBIT 2(B) — DETERMINATION OF CONTRIBUTION RATE OFFSETS FOR FIREFIGHTERS AND JUDGES	25
EXHIBIT 2(C) — EFFECT OF OFFSETS ON RECOMMENDED (HB 83) EMPLOYER RATES AND MEMBER RATES	26
EXHIBIT 3(A) — SCHEDULE OF FUNDING PROCESS	27
EXHIBIT 3(B) — COMPARISON OF FUNDED RATIOS	28
EXHIBIT 4(A) — ANALYSIS OF CHANGES IN CALCULATED CONTRIBUTION RATES	29
EXHIBIT 4(B) — ANALYSIS OF CHANGES IN UAAL	30
EXHIBIT 5(A) — ACTUARIAL PRESENT VALUE OF FUTURE BENEFITS BY FUND AND STATUS	31
EXHIBIT 5(B) — ACTUARIAL PRESENT VALUE OF FUTURE BENEFITS DETAILS FOR RETIREES AND BENEFICIARIES, BY STATUS	32
EXHIBIT 5(C) — ACTUARIAL PRESENT VALUE OF FUTURE BENEFITS DETAILS FOR INACTIVE MEMBERS, BY STATUS	33
EXHIBIT 5(D) — ACTUARIAL PRESENT VALUE OF FUTURE BENEFITS DETAILS FOR ACTIVE MEMBERS, BY BENEFIT	34
EXHIBIT 5(E) — ACTUARIAL PRESENT VALUE OF FUTURE BENEFITS DETAILS FOR MEMBERS RECEIVING BENEFITS, BY BENEFIT	35
EXHIBIT 6(A) — NORMAL COST	36
EXHIBIT 6(B) — NET EMPLOYER NORMAL COST	37
EXHIBIT 7(A) — DETERMINATION OF ACTUARIAL ACCRUED LIABILITY	38
EXHIBIT 7(B) — ACTUARIAL ACCRUED LIABILITY DETAILS OF MEMBER AND EMPLOYER FINANCING	39
EXHIBIT 8 — NUMBER OF MEMBER	40

EXHIBIT 9	—	ACTIVE MEMBERSHIP STATISTICS	41
EXHIBIT 10	—	RETIRED MEMBER STATISTICS	42
EXHIBIT 11(A)	—	MARKET VALUE OF ASSETS (ALL RETIREMENT SYSTEMS COMBINED)	43
EXHIBIT 11(B)	—	RECONCILIATION OF MARKET VALUE OF ASSETS (MVA)	44
EXHIBIT 12(A)	—	INVESTMENT RETURN RATES FOR PRIOR YEAR	45
EXHIBIT 12(B)	—	SUMMARY OF INVESTMENT RETURN RATES	46
EXHIBIT 13	—	CALCULATION OF ACTUARIAL VALUE OF ASSETS (ALL RETIREMENT SYSTEMS COMBINED)	47
EXHIBIT 14	—	TRANSFER ADJUSTMENTS TO ASSET VALUES	48
EXHIBIT 15(A)	—	CONTRIBUTION RATE FOR 3% SUBSTANTIAL SUBSTITUTE	49
EXHIBIT 15(B)	—	LIABILITIES FOR 3% SUBSTANTIAL SUBSTITUTE	50
EXHIBIT 16	—	LEG\GOV DETERMINATION OF CONTRIBUTION	51
EXHIBIT 17(A)	—	HISTORICAL SUMMARY OF STATISTICAL DATA - PUBLIC EMPLOYEES RETIREMENT SYSTEM (CONTRIBUTORY)	52
EXHIBIT 17(B)	—	HISTORICAL SUMMARY OF STATISTICAL DATA - PUBLIC EMPLOYEES RETIREMENT SYSTEM (NONCONTRIBUTORY)	53
EXHIBIT 17(C)	—	HISTORICAL SUMMARY OF STATISTICAL DATA - PUBLIC SAFETY RETIREMENT SYSTEM (CONTRIBUTORY)	54
EXHIBIT 17(D)	—	HISTORICAL SUMMARY OF STATISTICAL DATA - PUBLIC SAFETY RETIREMENT SYSTEM (NONCONTRIBUTORY)	55
EXHIBIT 17(E)	—	HISTORICAL SUMMARY OF STATISTICAL DATA - FIREFIGHTERS RETIREMENT SYSTEM	56
EXHIBIT 17(F)	—	HISTORICAL SUMMARY OF STATISTICAL DATA - JUDGES RETIREMENT SYSTEM	57
EXHIBIT 17(G)	—	HISTORICAL SUMMARY OF STATISTICAL DATA - LEGISLATIVE AND GOVERNORS RETIREMENT SYSTEM	58
<b>APPENDIX 1</b>		<b>STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS</b>	<b>60</b>
<b>APPENDIX 2</b>		<b>SUMMARY OF PRINCIPAL PLAN PROVISIONS</b>	
		PUBLIC EMPLOYEES RETIREMENT SYSTEMS (CONTRIBUTORY AND NONCONTRIBUTORY)	87
		PUBLIC SAFETY RETIREMENT SYSTEMS (CONTRIBUTORY AND NONCONTRIBUTORY)	92
		FIREFIGHTERS RETIREMENT SYSTEM	97
		JUDGES RETIREMENT SYSTEM	101
		GOVERNORS AND LEGISLATIVE PENSION PLAN	104



---

**SECTION I**  
EXECUTIVE SUMMARY

---

## EXECUTIVE SUMMARY AND CONTRIBUTION REQUIREMENTS

- Contribution rates have increased, an effect of the market meltdown in 2008 which drove the value of assets down
  - Market return of -23.4%, net of investment and administrative expenses
  - \$6.5 billion shortfall between actual market value as of December 31, 2008 (\$15.9 billion) and expected assets at this date (\$22.4 billion, based on 7.75% return assumption)
  - For State & School divisions, an increase of 2.11% of payroll
    - Fund 16 – Noncontributory State & School increased from 14.06% to 16.17%
  - For Local Government, an increase of 1.72% of payroll
  - Larger increases for Public Safety and Firefighters and Judges
  - Increases in recommended contributions shown in column (8) on Exhibit 1(a)
  - An appropriation will be required for Governors and Legislative Plan
    - first time in last twenty years
    - See Exhibit 16
  - Increases would have been larger if not for two changes adopted by the Board to smooth the contribution rate increases over several years
    - Widening of market value of assets corridor from 80% - 120% to 75% - 125%
    - Increasing the amortization period from 20 to 25 years
- Total projected contributions for all funds combined of \$800 million
  - “New money” of \$99 million needed, as shown on Exhibit 1(c)
    - “New money” excludes effect of expected payroll growth
- Exhibit 1(a) shows the new recommended contribution rates, and compares these to the rates certified for FY 2010 based on the last valuation
  - Rates include funding for the 3% substantial substitute benefit, where applicable
  - Rates do not include the 1.50% 401(k) contribution
  - Rates shown for both for the Public Employees Contributory and Noncontributory Retirement Systems exclude the contribution for the group insurance death benefit. PEHP determines the contribution rate for this benefit.
  - Offsets for Firefighters System and Judges System are shown
  - Rates shown on this table are the recommended contribution rates, not the actuarially determined rates. Under Utah Code §49-11-301(5), the Board may keep the contribution rate at the prior year’s level, in order to reach and maintain a 110% funded ratio. (However, except for the Salt Lake City fund in the Noncontributory Public Safety plan and the 3% Substantial Substitute Fund, the actuarially calculated contribution rates are larger than the prior year’s contribution rates.)

- Rates shown on Exhibit 1(a), column 6 are for the twelve-month period beginning July 1, 2010 (FY 2011)
- Rates may need to be adjusted for the effect of 2010 legislation, if material, and for the effect of the 4.0% COLA for any new employers that elect this benefit in 2009 or later.
- Exhibit 1(b) shows the development of the recommended rates under §49-11-301(5). The recommended rates are the larger of the actuarially calculated rates from the current valuation (Col. 2) and the rates certified for FY 2010 (Col. 3)
  - §49-11-301(5) permits the Board to set the contribution rate at the prior year’s level if the actuarially calculated rate would be less and the funded ratio is less than 110%
  - The policy is applied to the gross rates for the Firefighter funds and the Judges, i.e., before application of the offsets for the fire insurance premium tax receipts and the court fees
  - None of the funds has a funded ratio greater than 110%.
  - This policy is separately applied to the contribution rate for the 3% substantial substitute that is included with the contribution rates for the State and School funds, the State Public Safety funds and the Judges
- Exhibit 2(a) shows the components of the actuarially determined contribution rate, and Exhibit 4(a) reconciles the actuarially calculated rates determined by this valuation and the previous valuation
  - For all funds, the actuarially calculated contribution rate increased
  - Actuarial losses due to the poor investment results was the primary cause of the contribution increases
  - Liability losses in total were only about 10% of the asset losses
- The only benefit changes reflected were
  - The Public Safety 4% Maximum COLA for units (including the State of Utah) that elected this benefit in 2008
    - This included the creation of four new funds in the public safety systems, for the “Other A” and “Other B” units which elected the 4% maximum COLA
    - Assets were transferred to the new funds in proportion to the actuarial accrued liability (based on their liability under the 2.5% COLA)
  - The transfer of public safety members from the contributory system to the noncontributory system during FY 2008
    - All of the active members in Provo’s public safety fund transferred to the noncontributory system in 2008

- Except for the changes to the amortization period and the corridor used in the asset valuation method, the assumptions and methods used are the ones adopted in 2008
  - Including the 7.75% investment return assumption
  - No changes in this valuation other than the two noted above
- Amortization payments are based on:
  - 25-year funding period
  - Contributions determined as level percentage of pay (except for Governors and Legislators Plan, where amortization is in level payments)
  - Total payroll increases of 4.00% per year
  - No future growth in the number of active members is taken into account
- Plan earned -23.4% on a market-value basis, net of investment and administrative expenses
- Plan uses actuarial value to determine contribution rates and funded status
  - 5-year smoothing of net earnings above or below 7.75% assumption
  - Method typically reflects just 20% of last year's gain or loss
  - Still phasing in gains and losses from 2004 – 2007
  - However, method imposes a 25% corridor: the actuarial value is not allowed to exceed 125% of market value (or be less than 75% of market value)
    - This came into effect this year
    - Actuarial value is 125% of market value for all funds
    - Market value = \$15.9 billion, actuarial value = \$19.9 billion
  - Impact on contribution rates shown on Exhibit 4(a) col. (4), and Exhibit 4(b) col. (5).
  - Difference will be recognized over next four years
- In total, the systems experienced a small liability loss from liability experience (salary increases, retirement, mortality, etc.)
  - Impact on contribution rates shown on Exhibit 4(a) col. (5), and Exhibit 4(b) col. (4)
- The offset for fire insurance premium tax receipts is now less than the actuarially determined contribution rates for Division A in the Firefighters Retirement System, so this fund will have to make employer contributions
  - Member contributions, which have been reduced for several years by the “excess” offset available, will increase significantly for both divisions
  - See Exhibits 2(b) and 2(c) for details about the offsets applied to contribution rates for Firefighters

- Because of the asset losses, we now recommend an appropriation be made for the Governors and Legislative Plan. The value of plan assets no longer exceeds the actuarial present value of all future benefits for current members
  - \$153,398 should be appropriated on or before June 30, 2011
  - See Exhibit 16

---

**SECTION II**  
DISCUSSION

---

## DETERMINATION OF CALCULATED CONTRIBUTION RATES

The URS retirement systems, except for the Governors' and Legislators' Retirement Plan, are funded by employer contributions which are expressed as a percent of pay, and in some cases by member contributions. The Firefighters System and the Judges System receive additional funding from outside sources. As shown in Exhibit 2(a), the employer contribution rate can have as many as four components:

- The normal cost percentage (NC%)
- The amortization percentage (UAAL%)
- The contribution required to fund the 3% substantial substitute benefit (3%SS)
- The offset for fire insurance premium taxes and court fees which reduce the employer contribution rates in the Firefighters System and the Judges System, respectively.

The NC% is the theoretical amount which would be required to pay the members' benefits, based on the current plan provisions, if this amount had been contributed from each member's entry date and if the fund's experience exactly followed the actuarial assumptions. This is the amount it should cost to provide the benefits for an average new member. The NC% for each fund is shown in Exhibit 6(a).

Some of the funds require active member contributions, and for these, only the excess of the NC% over the member contribution rate is included in the employer contribution rate, as shown in Exhibit 6(b) and in column 2 of Exhibit 2(a).

The actuarial accrued liability (AAL) is the difference between (i) the actuarial present value of all future benefits for all current members of the fund, including active, inactive and retired members, and (ii) the actuarial present value of future normal costs. Thus the AAL represents the liability associated with past years. The unfunded actuarial accrued liability (UAAL) is the difference between the AAL and the actuarial value of assets (AVA). It is the shortfall/excess between the liability associated with prior years (the AAL) and the assets actually accumulated (the AVA). This shortfall/excess can arise from several sources, including actuarial gains and losses which are caused by differences between actual experience and the plan's assumptions, changes to the plan's actuarial assumptions, and amendments to the benefit provisions.

The UAAL% is the amount required to fund this difference. It is the amount, expressed as a level percentage of payroll, necessary to amortize the UAAL. The Board has specified that for this valuation the amortization should be over a period of 25 years. Column 3 of Exhibit 2(a) shows the UAAL% for each fund.

The 3% Substantial Substitute component of the employer contribution rate is only required for funds whose members are employees of the state (or who are paid by state funding). This piece is the amount necessary to fund the 3% Substantial Substitute. It is shown in column 4 of Exhibit 2(a), and is described more fully later.

The last piece of the contribution rate is the offset. The Firefighters System receives a portion of the fire insurance premium taxes collected by the state, and the Judges System receives a portion of court fees collected by the judiciary. The calculation of the offsets is shown in Exhibit 2(b).

Section 49-11-301(5) was added to the Utah Code in 2004. This law gives the Board the option of setting contribution rates at the higher of the previous year's rate or at the current year's actuarially calculated rate. The Board does not have to decrease the contribution rate from the prior year as long as it is funding towards or maintaining a funded ratio of 110%. As of this valuation, none of the funds currently exceeds the 110% funded level. The Board has followed the policy of holding the rates constant, but not less than the actuarially calculated rate, as permitted by §49-11-301(5).

Under the policy, the actuarial rates and last year's certified rates are compared, and the larger is set as the new certified rate. This is done separately for the contribution for the 3% Substantial Substitute fund, and then the rate for the 3% Substantial Substitute is added to the regular contribution rate, as shown on Exhibit 1(b). Then the offset for the fire insurance premium tax and the court fees are applied, as shown in Exhibit 2(c).

Last year, the offset for the fire insurance premium tax was large enough to reduce the employer contribution rate to zero for both of the Firefighter divisions, with the remaining offset being used to reduce the member contribution rates. (However, the member contribution rate was not permitted to be reduced below the prior year's net member rate.) This year, though, the offset is smaller than the employer contribution rate for Division A. Therefore, employers in this division will have to contribute to the fund. Further, because more of the offset is being applied to the employer contribution rates, there is less offset available to be applied to the member contribution rates. Therefore, as shown on Exhibit 1(a), the member rate for Division A will increase from 13.49% to 15.05%, an increase of 1.56 percentage points. The member rates for Division B firefighters will increase from 9.68% to 14.81%, an increase of 5.13 percentage points.

The contribution rates set in this valuation will become effective for the twelve-month period beginning July 1, 2010 (FY 2011).

The Governors' and Legislators' Retirement Plan, unlike the other systems, is funded by direct legislative appropriations. For the first time in more than 20 years we are recommending an appropriation be made for this plan by the end of FY 2011. Please see the discussion about the determination of the appropriation later in this section and the calculation of the appropriation on Exhibit 16.



## FINANCIAL DATA AND EXPERIENCE

As of December 31, 2008, the retirement systems that are part of URS have a total market value of \$15.9 billion. This excludes assets of the 401(k) and 457 plans which are also administered by URS. Assets of the various funds and systems are commingled for investment purposes. Financial information was gathered from the 2008 URS Comprehensive Annual Financial Report, with additional information provided by the URS staff.

The market value for the State's Public Safety fund shown in the CAFR includes \$3,140,000 Public Safety Retirees' Cost-Of-Living Increases Restricted Account. For valuation purposes, since this amount is to be used for all Public Safety units that adopt the optional 4% COLA, we removed this amount from the State's Public Safety funds' assets and treated it as an unallocated reserve. This will be allocated following the close of the election period during which units may elect the 4% COLA provision.

This report includes a number of exhibits related to plan assets. Exhibit 11(a) shows how the total market value is distributed among the various classes of investments. Currently, 49% of invested assets are held in equities and alternative investments, compared with 54% last year and 55% the year before.

Exhibit 11(b) shows a reconciliation of the market values between the beginning and end of 2008. The contributions shown in column 3 of Exhibit 11(b) include employer and member contributions, as well as court fees and fire insurance premium tax receipts. The 3% substantial substitute fund is shown as a separate item.

During 2008, the total investment return on market values was -23.4%, as shown on Exhibit 12(a). This return is net of all investment and administrative expenses.

In determining the contribution rates and funded status of the funds, an actuarial value of assets (AVA) is used, rather than the market value of assets. The method used to compute the AVA takes the difference between actual earnings and expected earnings (based on the assumed 7.75% investment return rate) each year, and recognizes the difference over five years, at 20% per year. This is intended to reduce the volatility of the contribution rates from year to year. This "smoothed" asset value is then subjected to the further constraint that the actuarial value of assets cannot be less than 75% or more than 125% of the market value of assets. Due to the significant decline in plan assets, the normal 5-year smoothing produced a preliminary actuarial value of assets of \$20.8 billion, or 130.7% of the market value of assets. Hence, the actuarial value of assets was reduced to \$19.9 billion so as not to exceed 125% of the market value of assets.

The development of the AVA is shown on Exhibits 13 and 14. The AVA is \$19.9 billion for all systems combined. This work was performed by the URS staff, but has been reviewed and approved by GRS. In the aggregate, the AVA is 125% of the MVA.

Some funds in the Contributory Public Employees System and the Contributory Public Safety System are paired with funds in the Public Employees and Public Safety noncontributory systems. For example, Fund 23, Other Division A, in the Public Safety Contributory System is paired with Fund 43, Other Division A, in the Public Safety Noncontributory System. In these cases, URS has established a policy of maintaining either the same difference between contribution rates for pairs of funds, or it maintains equal amortization percentages. To accomplish this, an amount of assets is transferred each year between fund pairs, as necessary. Exhibit 14, column 6 shows the change that must occur to the AVA in order to accomplish this. Exhibit 14, column 3 shows how much must be transferred between systems to accomplish this in terms of market value.

In addition to the normal transfer between paired funds, there were special transfers out of the Public Safety Other Division A and Other Division B funds. As you are aware, there is currently a window open in the Public Safety systems allowing employers to elect a 4% maximum COLA, instead of the 2.5% COLA that is the base benefit provided in the systems. The Other Division A and Other Division B funds are comprised of many employers, and some of these employers have elected to provide the 4% maximum COLA. As a result, these employers' assets and liabilities need to be segregated from the other employers that still provide a 2.5% COLA. To accomplish the task, four new funds were created in the Public Safety Systems. Members of these funds will be transferred as follows: Contributory Other A (Fund 23) to Fund 77, Contributory Other B (Fund 29) to Fund 74, Noncontributory Other A (Fund 43) to Fund 75, and Noncontributory Other B (Fund 49) to Fund 76.

In order to determine the amount of assets to be transferred, we determined the liabilities for the transferring units under the 2.5% COLA and compared that liability with the liabilities of the entire fund. That ratio was then multiplied by the market value and actuarial value of assets to determine the amount of assets to be transferred. This provided both funds with the same funded ratio before reflecting the additional liabilities associated with the 4% maximum COLA.

Because the new funds also contain employers that have members in both the Contributory and Noncontributory systems, we have continued the practice of pairing funds and transferring assets between the paired funds to produce the same amortization payment as a percentage of pay. For this purpose, Funds 77 & 75 were paired as were Funds 74 & 76. The transfers shown on Exhibit 14 are the net transfers of the assets from the 2.5% maximum COLA funds and the rebalancing transfer between the paired 4% maximum COLA funds.

In addition to the market return, Exhibit 12(a) also shows the return on the actuarial value for URS. For 2008, this return was -1.1%. (This includes the effect of the change in the corridor, from 80%-120% to 75%-125%. Absent this change, the actuarial return would have been -5.0%.) Because this is less than the 2008 assumed 7.75% investment return, the plan experienced a loss on the actuarial value of assets. Exhibit 12(b) shows a summary of market and actuarial return rates in recent years.

Exhibits 4a and 4b show the reconciliation of the contribution rates and the unfunded actuarial accrued liabilities from the last valuation to this one, showing the effect of asset and liability gains and losses, changes in assumptions, changes in plan provisions, etc.

## MEMBER DATA

Member data was supplied by URS staff on electronic files as of December 31, 2008. While we did not audit this data, we did perform various tests to ensure that it was internally consistent, consistent with the prior year's data, and was reasonable overall.

Exhibit 8 shows the number of members by category (active, inactive, retired, etc.) and by fund. Exhibit 9 shows active member statistics by fund, and Exhibit 10 shows retiree statistics by fund. Exhibits 17(a)-17(g) show summaries of certain historical data, including membership statistics, for each system.

For all funds combined, the number of active members increased from 103,705 to 106,217, a 2.4% increase. Last year, total active membership grew 3.5%, and over the last ten years, membership growth has averaged 1.7% per year.

Total active member payroll grew 7.0% last year for all funds combined, compared to 8.6% the prior year. Payroll growth for the last ten years has averaged 4.9% per year.

---

## BENEFIT PROVISIONS

Appendix 2 includes a summary of the benefit provisions for each of the retirement systems in URS. The valuation would typically reflect any benefit changes enacted by the 2009 legislature. Although not effective on the valuation date, such legislation would generally be effective on or before the contribution rates actually go into effect at July 1, 2010. However, there was no material legislation enacted in the 2009 legislative session affecting the benefits or contributions of URS. (SB 145 allows married Public Safety members to elect a Joint and 75% Survivor option in place of the standard Joint and 65% Survivor benefit, but this bill did not affect plan liabilities, because the option amount is determined actuarially.)

SB19 was passed during the 2008 legislative session. This law opened a window through December 2009 to allow employers of the Public Safety Retirement Systems to adopt a 4% maximum COLA in lieu of the current 2.5% maximum COLA. (Adoption of the 4.0% maximum COLA is mandatory for the State of Utah.) The window was subsequently extended through December 2012 by SB139 during the 2009 session. For those employers making the election during calendar year 2009, the 4% maximum COLA will be effective January 1, 2010. This valuation reflects the elections made by participating employers through December 31, 2008.

Changes to mortality rates and the interest rate were among the assumption changes adopted based on the 2008 experience study. As a result of these changes, URS adopted revised optional forms of payment factors and early retirement reduction factors for the systems—Public Employees and Judges—that have these options.

This valuation reflects all benefits promised to URS members, either by the statutes, or in the case of the special supplement for the Governors' and Legislators' Retirement Plan and the ROPP payments (discussed later), by the Board. There are no ancillary benefits that might be deemed a URS liability if continued beyond the availability of funding by the current funding source.

## ACTUARIAL METHODS AND ASSUMPTIONS

Appendix 1 includes a summary of the actuarial assumptions and methods used in this valuation.

The Board, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. Current Board policy is to perform an experience study every three years. In connection with the appropriate valuation, the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board.

Except as noted below, the current actuarial assumptions and methods are the same as used for the prior valuation. These assumptions and methods were adopted effective January 1, 2008. The assumptions adopted were the ones recommended by the actuary. The next experience analysis is scheduled for 2011.

Costs are determined using the Entry Age actuarial cost method. The assumed investment return rate is 7.75%. There were two changes to the assumptions and methods used in the determination of the contribution rates. The first change was a widening of the market value of assets corridor used in the determination of the actuarial value of assets from 80% - 120% to 75% - 125%. The second change was to increase the amortization period for amortizing the unfunded actuarial accrued liability from 20 to 25 years. Neither of these changes impacted the liabilities of the System. The changes are designed to produce a more stable pattern of contribution rate increases over the next few years than would have otherwise have occurred.

---

## GASB 25 AND FUNDING PROGRESS

Governmental Accounting Standards Board Statement No. 25 (GASB 25) contains certain accounting requirements for URS. In particular, it requires the inclusion of two special schedules in the URS annual report:

1. Schedule of Funding Progress
2. Schedule of Employer Contributions

Information needed to prepare the Schedule of Funding Progress is included in Exhibit 3(a). This shows that overall URS has a funded ratio (ratio of actuarial assets to accrued liabilities) of 86.6%. This is a significant decrease from the prior year when the funded ratio was 95.1%. This is a direct result of the severe decline in the investment markets in the 4<sup>th</sup> quarter of calendar year 2008. Many of the Noncontributory Public Safety funds as well as the 3% Substantial Substitute fund now have funded ratios below 80%. The latter has only been a liability of URS since 1994. See Exhibit 3(a), column 5.

GASB 25 also requires that plans calculate an Annual Required Contribution (ARC), and, if actual contributions received are less than the ARC, this must be disclosed. For this disclosure, URS treats the Board-established employer contribution rate as the ARC, as long as this produces a funding period of less than 30 years.

Under GASB 25, the ARC must be calculated in accordance with certain parameters. In particular, it must include a payment to amortize the UAAL. This amortization payment must be computed using a funding period no greater than 30 years. Further, the amortization payment included in the ARC may be computed as a level amount, or it may be computed as an amount which increases with payroll. However, if payments are computed on a level-percent-of-payroll approach, the payroll growth assumption may not anticipate future membership growth.

The calculated employer contribution rate is computed as a level percentage of payroll using a 25-year amortization period. Since the recommended employer rate is the greater of the prior year's certified rate or this year's calculated rate, the recommended rate meets the definition of an acceptable ARC.

## GOVERNORS AND LEGISLATIVE PENSION PLAN

The Governors and Legislative Pension Plan (Leg/Gov Plan) is funded by direct appropriations rather than through pay-period contributions. For at least the past 20 years, no appropriations have been required. As a result of the significant decline in the asset values of the fund, an appropriation is now recommended.

The Leg/Gov Plan is unique among the retirement systems in URS in that neither the benefits of the plan nor the contributions to the plan are tied to member pay. As a result, the calculation of the appropriation is performed in a slightly different manner than the determination of the contribution rates for the other funds.

As you are aware, the Entry Age Normal funding method is used to determine the cost allocation of the contribution requirements because it produces a cost pattern that remains level over time (if the assumptions are met). With the other URS systems, the cost is determined so as to remain level as a percentage of pay over time. Since neither the contributions nor benefits of the Leg/Gov Plan are pay related, it would be inappropriate to determine the cost of the plan as a level percentage of pay. Therefore, we have determined the cost as a level dollar amount. This method will produce appropriations that should remain level over time (if the actuarial assumptions are exactly met).

The Entry Age Normal level dollar approach will be used to determine the normal cost and actuarial accrued liabilities of the Leg/Gov Plan. In addition, the determination of the amortization payment for amortizing the unfunded liabilities of the system is determined using a level dollar approach as well. This valuation will be determining the appropriation for fiscal year 2011. Because of the lag between the determination of the dollar contribution amount and the payment of the contribution, we included an adjustment for interest in the determination of the appropriation. Please see Exhibit 16 for the determination of the appropriation amount.

## FIREFIGHTERS AND JUDGES OFFSETS

A portion of the fire insurance premium taxes collected by the State of Utah is contributed to the Firefighters System, and a portion of the court fees collected by the state judiciary is contributed to the Judges System. To account for this prospectively, the recommended contribution rates for the funds in these systems are reduced.

In order to dampen year-to-year fluctuations in the offsets, we are using a rolling three-year average in computing the offsets. First, we calculate a percentage of pay offset for each year, equal to receipts divided by payroll. (For the Firefighters, all calculations are done on a combined basis for Divisions A and B.) Then the offset percentages for the just completed year and the two prior years are averaged. This average is then used as the current year's offset. The calculation of the offsets is shown on Exhibit 2(b).

The offset for the Firefighter System decreased from 12.34% to 11.87%, and the offset for the Judges System increased from 13.83% to 14.08%. The decrease in the Firefighter System offset is primarily due to a 26% decrease in the Fire Insurance Premium Tax receipts during 2008. The increase in the Judges' offset was primarily due to an increase in the amount of court fees received during 2008.

It should be noted that the employer contribution rates for Division A of the Firefighter's Retirement System exceeds the offset for the fire insurance premium. Therefore, the employers in this division will be required to make contributions to the fund. Further, for both divisions, more of the offset is applied to the employer contribution rates, leaving less to be used to offset the member contribution rates. This will result in a significant increase in the member contribution rates in both divisions. In particular, the member rates for Division B will increase by more than 5%. See Table 2(c) for the effect of the offsets on the employer and member rates.

The 2004 Legislature enacted legislation which created the Public Safety Retirees' Cost-of-Living Increases Restricted Account. As a result of this legislation a portion of fire insurance premium tax receipts that would normally have been contributed to the Firefighter System may instead be redirected to this new account. No funds were transferred to this account in calendar 2008.

As a result of the creation of the Public Safety 4% maximum COLA window, funds from Public Safety Retirees' Cost-of-Living Increases Restricted Account will be transferred to the Public Safety funds which elect the 4% maximum COLA. The initial transfer will not occur until after the window closes in 2012.



### 3% SUBSTANTIAL SUBSTITUTE

Due to the removal of the state income tax exemption for benefits paid by URS, legislation was passed to provide a 3% retirement benefit increase for URS retirees who were members of URS prior to January 1, 1989. All future retirees who were members of URS prior to January 1, 1989 will be eligible for this benefit as well, as will beneficiaries of eligible members.

The 3% increase applies to all benefits paid to eligible members, including benefits earned after January 1, 1989 and including future cost-of-living increases. However, the 3% increase does not apply to refunds of employee contributions or to the Restoration of Purchasing Power (ROPP) benefits; see the next section.

Due to legislation passed in 1994, this benefit is now pre-funded. The obligation for payment of this benefit belongs to the state, however, not to the employer. Therefore the contribution needed to fund the benefit is determined as an addition to the employer contribution rates required for the State and School Funds in the Public Employees Contributory and Noncontributory Systems, the State of Utah funds in the Public Safety Contributory and Noncontributory Systems, and the Judges System.

The actuarially determined contribution required to pay for this benefit is 0.60%, 0.10% less than last year. Details of the calculation are shown in Exhibit 15(a), while Exhibit 15(b) shows a distribution of the liabilities associated with this benefit.

The Board has the authority, under Section 11-49-301(5), to hold the contribution rate for the Substantial Substitute at 0.85% (last year's rate).

### **RESTORATION OF PURCHASING POWER (ROPP)**

URS provides a special benefit to a closed group of retired members. This benefit was granted by the Board of Trustees, not by the legislature, and hence it does not appear in the statutes governing URS. The Board provided this benefit, called the Restoration of Purchasing Power benefit or ROPP benefit, to retired members during the 1980s, in order to counteract some of the impact of inflation.

The ROPP benefit is a fixed amount that does not increase and is not adjusted for changes in the cost of living. It is provided only to the closed group of members who were retired at the time of the Board's action. Therefore, since the group is closed and since the benefit amount cannot increase, this liability decreases from year to year as the retiree group receiving the ROPP grows older and decreases in size due to mortality.

Exhibit 5(e) shows the liabilities for the ROPP benefits in column 5.

---

## **PUBLIC SAFETY RETIREES' COST-OF-LIVING INCREASES RESTRICTED ACCOUNT**

The 2004 Legislature enacted legislation which created a new fund—the Public Safety Retirees' Cost-of-Living Increases Restricted Account—under the General Fund of the State of Utah, effective July 1, 2004.

The legislation appropriated \$1.1 million from the Fire Academy Support Account. The legislation also required that a portion of the fire insurance premium tax receipts that currently go to the Firefighters System be redirected to this new fund. However, only money above a threshold determined actuarially goes to the Public Safety Retirees' Cost-of-Living Increases Restricted Account. Information about how much of the fire insurance premium tax receipts should go to the Firefighters Retirement System and how much should go to the Public Safety Retirees' Cost-of-Living Increases Restricted Account is provided to URS by the actuary in a separate communication.

The 2008 legislature opened a window to allow employers of the Public Safety Systems to elect a 4.0% maximum COLA. Employers that elect the 4.0% maximum COLA will be entitled to a share of the funds held in the Public Safety Retirees' Cost-of-Living Increases Restricted Account. As of Dec. 31, 2008, the market value of this fund is \$3.140 million. The initial allocation of these funds will not occur until after the window closes at the end of 2012. In future years, any funds that would have been transferred into this account will be allocated to the employers that elected the 4.0% COLA.

---

**SECTION III**  
SUPPORTING EXHIBITS

---

**Comparison of Prior Year Certified and  
Current Year Recommended Contribution Rates**

Fund/Division (1)	Prior Year Valuation Certified Rates for FY 2010			Current Year Valuation Recommended Rates for FY 2011			Increase/ (Decrease) in Total (8)
	Member	Employer	Total	Member	Employer	Total	
	(2)	(3)	(4)	(5)	(6)	(7)	
I. Public Employees Contributory							
A. Local Government	6.00%	7.49%	13.49%	6.00%	9.21%	15.21%	1.72%
B. State and School	6.00%	9.57%	15.57%	6.00%	11.68%	17.68%	2.11%
II. Public Employees Noncontributory							
A. Local Government	0.00%	11.50%	11.50%	0.00%	13.22%	13.22%	1.72%
B. State and School	0.00%	14.06%	14.06%	0.00%	16.17%	16.17%	2.11%
III. Public Safety Contributory							
A. State	12.29%	19.01%	31.30%	12.29%	21.45%	33.74%	2.44%
B. Other Division A (2.5% COLA)	12.29%	12.47%	24.76%	12.29%	14.57%	26.86%	2.10%
C. Other Division A (4% COLA)	12.29%	15.01%	27.30%	12.29%	18.10%	30.39%	3.09%
D. Provo	13.54%	17.37%	30.91%	N/A	N/A	N/A	N/A
E. Logan	11.13%	17.81%	28.94%	11.13%	20.69%	31.82%	2.88%
F. Other Division B (2.5% COLA)	10.50%	16.67%	27.17%	10.50%	18.83%	29.33%	2.16%
G. Other Division B (4% COLA)	10.50%	19.17%	29.67%	10.50%	23.04%	33.54%	3.87%
IV. Public Safety Noncontributory							
A. State	0.00%	30.18%	30.18%	0.00%	32.48%	32.48%	2.30%
B. Other Division A (2.5% COLA)	0.00%	23.34%	23.34%	0.00%	25.83%	25.83%	2.49%
C. Other Division A (4% COLA)	0.00%	25.90%	25.90%	0.00%	28.55%	28.55%	2.65%
D. Salt Lake City	0.00%	35.71%	35.71%	0.00%	35.71%	35.71%	0.00%
E. Ogden	0.00%	33.11%	33.11%	0.00%	34.52%	34.52%	1.41%
F. Provo	0.00%	30.91%	30.91%	0.00%	32.70%	32.70%	1.79%
G. Logan	0.00%	27.74%	27.74%	0.00%	31.24%	31.24%	3.50%
H. Bountiful	0.00%	23.07%	23.07%	0.00%	27.25%	27.25%	4.18%
I. Other Division B (2.5% COLA)	0.00%	26.21%	26.21%	0.00%	28.06%	28.06%	1.85%
J. Other Division B (4% COLA)	0.00%	28.73%	28.73%	0.00%	32.52%	32.52%	3.79%
V. Firefighters							
A. Division A							
1. Gross Rate	15.05%	10.78%	25.83%	15.05%	12.95%	28.00%	2.17%
2. Less Estimated Offset	<u>-1.56%</u>	<u>-10.78%</u>	<u>-12.34%</u>	<u>0.00%</u>	<u>-11.87%</u>	<u>-11.87%</u>	<u>0.47%</u>
3. Net Rate	13.49%	0.00%	13.49%	15.05%	1.08%	16.13%	2.64%
B. Division B							
1. Gross Rate	16.71%	4.61%	21.32%	16.71%	9.97%	26.68%	5.36%
2. Less Estimated Offset	<u>-7.03%</u>	<u>-4.61%</u>	<u>-11.64%</u>	<u>-1.90%</u>	<u>-9.97%</u>	<u>-11.87%</u>	<u>-0.23%</u>
3. Net Rate	9.68%	0.00%	9.68%	14.81%	0.00%	14.81%	5.13%
VI. Judges							
A. Gross Rate	0.00%	30.92%	30.92%	0.00%	36.35%	36.35%	5.43%
B. Less Estimated Offset	<u>-0.00%</u>	<u>-13.83%</u>	<u>-13.83%</u>	<u>-0.00%</u>	<u>-14.08%</u>	<u>-14.08%</u>	<u>-0.25%</u>
C. Net Rate	0.00%	17.09%	17.09%	0.00%	22.27%	22.27%	5.18%

Note: Rates reflect 3% Substantial Substitute where applicable  
Group Insurance contribution rate has been excluded  
Recommended rates reflect application of U.C. Sec. 49-11-301(5)

Development of Recommended Contribution Rates

Fund/Division (1)	Actuarially Calculated Rates for Current Year* (2)	Certified Rates from Prior Year* (3)	Larger of Columns (2,3)* (4)	Recommended Rates Including 3% Substantial Substitute (5)
I. Public Employees Contributory				
A. Local Government	9.21%	7.49%	9.21%	9.21%
B. State and School	10.83%	8.72%	10.83%	11.68%
II. Public Employees Noncontributory				
A. Local Government	13.22%	11.50%	13.22%	13.22%
B. State and School	15.32%	13.21%	15.32%	16.17%
III. Public Safety Contributory				
A. State	20.60%	18.16%	20.60%	21.45%
B. Other Division A (2.5% COLA)	14.57%	12.47%	14.57%	14.57%
C. Other Division A (4% COLA)	18.10%	15.01%	18.10%	18.10%
D. Logan	20.69%	17.81%	20.69%	20.69%
E. Other Division B (2.5% COLA)	18.83%	16.67%	18.83%	18.83%
F. Other Division B (4% COLA)	23.04%	19.17%	23.04%	23.04%
IV. Public Safety Noncontributory				
A. State	31.63%	29.33%	31.63%	32.48%
B. Other Division A (2.5% COLA)	25.83%	23.34%	25.83%	25.83%
C. Other Division A (4% COLA)	28.55%	25.90%	28.55%	28.55%
D. Salt Lake City	35.44%	35.71%	35.71%	35.71%
E. Ogden	34.52%	33.11%	34.52%	34.52%
F. Provo	32.70%	30.91%	32.70%	32.70%
G. Logan	31.24%	27.74%	31.24%	31.24%
H. Bountiful	27.25%	23.07%	27.25%	27.25%
I. Other Division B (2.5% COLA)	28.06%	26.21%	28.06%	28.06%
J. Other Division B (4% COLA)	32.52%	28.73%	32.52%	32.52%
V. Firefighters				
A. Division A	12.95%	10.78%	12.95%	12.95%
B. Division B	9.97%	4.61%	9.97%	9.97%
VI. Judges	35.50%	30.07%	35.50%	36.35%
VII. 3% Substantial Substitute	0.60%	0.85%	0.85%	N/A

\* Rates exclude 3% Substantial Substitute

Note: Rates shown for Firefighters and Judges exclude offsets for fire insurance premium tax and court fees  
Rates exclude the Group Insurance contribution rate  
Rates in Column (4) reflect application of U.C. Sec. 49-11-301(5).

Estimated Fiscal Year 2011 Contribution Requirements

Fund/Division (1)	FY 2011 Projected Pay (2)	FY 2011 Employer Contribution Rate (3)	Employer Contribution (2) x (3) (4)	Increase in Employer Contribution Rate [See Exhibit 1(a)] (5)	"New Money" Requirement (2) x (5) (6)
I. Public Employees Contributory					
A. Local Government	71,090	9.21%	6,547	1.72%	1,223
B. State and School	71,652	11.68%	8,369	2.11%	1,512
C. Subtotal	142,742		14,916		2,735
II. Public Employees Noncontributory					
A. Local Government	977,849	13.22%	129,272	1.72%	16,819
B. State and School	3,295,357	16.17%	532,859	2.11%	69,532
C. Subtotal	4,273,206		662,131		86,351
III. Public Safety Contributory					
A. State	577	21.45%	124	2.44%	14
B. Other Division A (2.5% COLA)	7,905	14.57%	1,152	2.10%	166
C. Other Division A (4% COLA)	354	18.10%	64	3.09%	11
D. Logan	557	20.69%	115	2.88%	16
E. Other Division B (2.5% COLA)	672	18.83%	127	2.16%	15
F. Other Division B (4% COLA)	501	23.04%	115	3.87%	19
G. Subtotal	10,566		1,697		241
IV. Public Safety Noncontributory					
A. State	132,768	32.48%	43,123	2.30%	3,054
B. Other Division A (2.5% COLA)	141,777	25.83%	36,621	2.49%	3,530
C. Other Division A (4% COLA)	33,431	28.55%	9,545	2.65%	886
D. Salt Lake City	30,142	35.71%	10,764	0.00%	-
E. Ogden	6,234	34.52%	2,152	1.41%	88
F. Provo	5,542	32.70%	1,812	1.79%	99
G. Logan	2,296	31.24%	717	3.50%	80
H. Bountiful	2,166	27.25%	590	4.18%	91
I. Other Division B (2.5% COLA)	37,542	28.06%	10,534	1.85%	695
J. Other Division B (4% COLA)	4,835	32.52%	1,572	3.79%	183
K. Subtotal	396,734		117,430		8,706
V. Firefighters					
A. Division A	27,632	1.08%	298	1.08%	298
B. Division B	85,819	0.00%	-	0.00%	-
C. Subtotal	113,451		298		298
VI. Judges	15,821	22.27%	3,523	5.18%	820
VII. Governors and Legislative	576	N/A	153	N/A	153
VIII. Grand Total	4,953,096		800,148		99,304

Note: Rates reflect 3% Substantial Substitute where applicable  
Group Insurance contribution rate has been excluded  
Rates for Firefighters and Judges are net of offsets for fire insurance premium tax receipts and court fees  
Recommended rates reflect application of U.C. Sec. 49-11-301(5)  
Amounts shown are in \$ thousands  
Columns may not add to total due to rounding

Components of Actuarially Calculated Contribution Rates

Fund/Division	Net Normal Cost	Amortization of UAAL	3% Substantial Substitute	Gross Employer Rate (2 + 3 + 4)	Offset	Net Employer Rate (5 - 6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
I. Public Employees Contributory						
A. Local Government	4.96%	4.25%	0.00%	9.21%	0.00%	9.21%
B. State and School	4.03%	6.80%	0.60%	11.43%	0.00%	11.43%
II. Public Employees Noncontributory						
A. Local Government	11.04%	2.18%	0.00%	13.22%	0.00%	13.22%
B. State and School	11.72%	3.60%	0.60%	15.92%	0.00%	15.92%
III. Public Safety Contributory						
A. State	11.60%	9.00%	0.60%	21.20%	0.00%	21.20%
B. Other Division A (2.5% COLA)	10.08%	4.49%	0.00%	14.57%	0.00%	14.57%
C. Other Division A (4% COLA)	11.65%	6.45%	0.00%	18.10%	0.00%	18.10%
D. Logan	10.70%	9.99%	0.00%	20.69%	0.00%	20.69%
E. Other Division B (2.5% COLA)	12.19%	6.64%	0.00%	18.83%	0.00%	18.83%
F. Other Division B (4% COLA)	12.86%	10.18%	0.00%	23.04%	0.00%	23.04%
IV. Public Safety Noncontributory						
A. State	22.63%	9.00%	0.60%	32.23%	0.00%	32.23%
B. Other Division A (2.5% COLA)	21.34%	4.49%	0.00%	25.83%	0.00%	25.83%
C. Other Division A (4% COLA)	22.10%	6.45%	0.00%	28.55%	0.00%	28.55%
D. Salt Lake City	21.44%	14.00%	0.00%	35.44%	0.00%	35.44%
E. Ogden	21.46%	13.06%	0.00%	34.52%	0.00%	34.52%
F. Provo	21.59%	11.11%	0.00%	32.70%	0.00%	32.70%
G. Logan	21.25%	9.99%	0.00%	31.24%	0.00%	31.24%
H. Bountiful	21.55%	5.70%	0.00%	27.25%	0.00%	27.25%
I. Other Division B (2.5% COLA)	21.42%	6.64%	0.00%	28.06%	0.00%	28.06%
J. Other Division B (4% COLA)	22.34%	10.18%	0.00%	32.52%	0.00%	32.52%
V. Firefighters						
A. Division A	11.35%	1.60%	0.00%	12.95%	11.87%	1.08%
B. Division B	9.67%	0.30%	0.00%	9.97%	9.97%	0.00%
VI. Judges	27.31%	8.19%	0.60%	36.10%	14.08%	22.02%



**Determination of Contribution Rate Offsets for Firefighters and Judges**

A. Firefighter's Offset

	<u>2006</u>	<u>2007</u>	<u>2008</u>
1. Calendar Year			
2. Fire insurance premium receipts	\$ 9,518,000	\$ 13,797,000	\$ 10,219,000
3. Combined payroll for both funds*	87,088,690	94,488,204	101,507,722
4. Premiums as percentage of payroll	10.93%	14.60%	10.07%
5. Offset: 3-year arithmetic average of percent of payroll			11.87%

B. Judge's Offset

	<u>2006</u>	<u>2007</u>	<u>2008</u>
1. Calendar Year			
2. Court fees	\$ 1,723,000	\$ 1,850,000	\$ 2,072,000
3. Payroll*	12,335,692	13,386,997	14,346,512
4. Premiums as percentage of payroll	13.97%	13.82%	14.44%
5. Offset: 3-year arithmetic average of percent of payroll			14.08%

\* Reported payroll for members active at end of year

**Effect of Offsets on Recommended Employer Rates  
and Member Rates**

Fund/Division (1)	Gross Recommended Employer Rates (2)	Offset Percentage (3)	Net Employer Rate Not Less Than Zero (4)	Unused Offset* (3) - (2) (5)
I. Firefighters				
Division A	12.95%	11.87%	1.08%	0.00%
Division B	9.97%	11.87%	0.00%	1.90%
II. Judges	36.35%	14.08%	22.27%	0.00%

Fund/Division (1)	Gross Member Rate (2)	Available Offset* (3)	Net (2) - (3) (4)	Net Member Rate from Prior Year (5)	Greater of (4, 5) (6)
I. Firefighters					
Division A	15.05%	0.00%	15.05%	13.49%	15.05%
Division B	16.71%	1.90%	14.81%	9.68%	14.81%

\* Available to offset member contribution rates

Schedule of Funding Progress

Fund/Division	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded AAL (UAAL) (3 - 2)	Funded Ratio (2 / 3)	Covered Payroll	UAAL as a Percentage of Covered Payroll (4 / 6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
I. Public Employees Contributory						
A. Local Government	358,620	404,913	46,293	88.6%	64,039	72.3%
B. State and School	739,091	813,659	74,568	90.8%	64,931	114.8%
C. Subtotal	1,097,711	1,218,572	120,861	90.1%	128,970	93.7%
II. Public Employees Noncontributory						
A. Local Government	2,743,924	3,070,328	326,403	89.4%	877,481	37.2%
B. State and School	12,923,549	14,741,943	1,818,394	87.7%	2,960,453	61.4%
C. Subtotal	15,667,473	17,812,271	2,144,797	88.0%	3,837,934	55.9%
III. Public Safety Contributory						
A. State	61,813	62,609	795	98.7%	521	152.6%
B. Other Division A (2.5% COLA)	129,378	134,814	5,437	96.0%	7,108	76.5%
C. Other Division A (4% COLA)	28,503	28,852	350	98.8%	319	109.7%
D. Logan	11,749	12,601	852	93.2%	501	170.1%
E. Other Division B (2.5% COLA)	29,861	30,544	683	97.8%	607	112.5%
F. Other Division B (4% COLA)	6,457	7,237	781	89.2%	451	173.2%
G. Subtotal	267,761	276,657	8,898	96.8%	9,507	93.6%
IV. Public Safety Noncontributory						
A. State	654,373	837,361	182,988	78.1%	119,247	153.5%
B. Other Division A (2.5% COLA)	546,128	643,656	97,528	84.8%	127,213	76.7%
C. Other Division A (4% COLA)	132,454	165,470	33,015	80.0%	30,009	110.0%
D. Salt Lake City	180,841	245,433	64,592	73.7%	27,085	238.5%
E. Ogden	46,009	58,480	12,471	78.7%	5,595	222.9%
F. Provo	31,740	41,170	9,430	77.1%	4,976	189.5%
G. Logan	6,677	10,191	3,514	65.5%	2,064	170.3%
H. Bountiful	15,939	17,829	1,890	89.4%	1,948	97.0%
I. Other Division B (2.5% COLA)	111,568	149,724	38,156	74.5%	33,703	113.2%
J. Other Division B (4% COLA)	20,158	27,696	7,538	72.8%	4,346	173.4%
K. Subtotal	1,745,887	2,197,010	451,122	79.5%	356,186	126.7%
V. Firefighters						
A. Division A	97,806	104,568	6,762	93.5%	24,673	27.4%
B. Division B	668,065	672,054	3,989	99.4%	76,835	5.2%
C. Subtotal	765,871	776,622	10,751	98.6%	101,508	10.6%
VI. Judges	126,120	145,965	19,845	86.4%	14,347	138.3%
VII. Governors and Legislative	10,841	10,982	141	98.7%	532	26.5%
VIII. 3% Substantial Substitute	171,988	494,319	322,331	34.8%	N/A	N/A
IX. Grand Total	19,853,652	22,932,398	3,078,746	86.6%	4,448,984	69.2%

Note: Amounts shown are in \$ thousands  
Columns may not add to total due to rounding

Comparison of Funded Ratios

Fund/Division (1)	Funded Ratios as of January 1		
	2009 (2)	2008 (3)	2007 (4)
I. Public Employees Contributory			
A. Local Government	88.6%	93.4%	94.2%
B. State and School	90.8%	94.6%	94.6%
C. Subtotal	90.1%	94.2%	94.5%
II. Public Employees Noncontributory			
A. Local Government	89.4%	98.1%	100.0%
B. State and School	87.7%	96.6%	97.1%
C. Subtotal	88.0%	96.9%	97.6%
III. Public Safety Contributory			
A. State	98.7%	99.3%	99.4%
B. Other Division A (2.5% COLA)	96.0%	97.7%	98.0%
C. Other Division A (4% COLA)	98.8%	N/A	N/A
D. Logan	93.2%	95.7%	95.2%
E. Other Division B (2.5% COLA)	97.8%	90.8%	90.4%
F. Other Division B (4% COLA)	89.2%	N/A	N/A
G. Subtotal	96.8%	95.4%	96.2%
IV. Public Safety Noncontributory			
A. State	78.1%	90.5%	91.7%
B. Other Division A (2.5% COLA)	84.8%	94.0%	95.6%
C. Other Division A (4% COLA)	80.0%	N/A	N/A
D. Salt Lake City	73.7%	78.8%	75.5%
E. Ogden	78.7%	84.1%	85.2%
F. Provo	77.1%	85.0%	87.3%
G. Logan	65.5%	76.3%	77.2%
H. Bountiful	89.4%	97.7%	100.6%
I. Other Division B (2.5% COLA)	74.5%	85.9%	85.7%
J. Other Division B (4% COLA)	72.8%	N/A	N/A
K. Subtotal	79.5%	89.9%	90.9%
V. Firefighters			
A. Division A	93.5%	101.9%	102.2%
B. Division B	99.4%	108.3%	110.6%
C. Subtotal	98.6%	107.5%	109.5%
VI. Judges	86.4%	95.9%	99.8%
VII. Governors and Legislative	98.7%	119.0%	119.2%
VIII. 3% Substantial Substitute	34.8%	36.1%	34.4%
IX. Grand Total	86.6%	95.1%	95.8%

Analysis of Changes in Calculated Contribution Rates

Fund/Division	Calculated Rate From Jan. 1, 2008 Valuation	Changes in Calculated Rate Due To						Act. vs Exp. Contributions	Assumption & Methods Change	Calculated Rate Jan. 1, 2009 Valuation
		Payroll Growth	Investment Return	Liabilities	Creation of 4% COLA Funds	Legislation				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
I. Public Employees Contributory										
A. Local Government	7.49%	-0.01%	2.89%	0.14%	0.00%	0.00%	-0.04%	-1.26%	9.21%	
B. State and School	9.07%	-0.05%	4.05%	0.32%	0.00%	0.00%	-0.04%	-1.92%	11.43%	
II. Public Employees Noncontributory										
A. Local Government	11.50%	-0.01%	2.89%	0.14%	0.00%	0.00%	-0.04%	-1.26%	13.22%	
B. State and School	13.56%	-0.05%	4.05%	0.32%	0.00%	0.00%	-0.04%	-1.92%	15.92%	
III. Public Safety Contributory										
A. State	15.77%	-0.25%	5.33%	0.60%	0.00%	2.95%	-0.05%	-3.15%	21.20%	
B. Other Division A (2.5% COLA)	12.47%	0.52%	4.43%	-0.66%	-0.14%	0.00%	0.02%	-2.07%	14.57%	
C. Other Division A (4% COLA)	12.47%	0.52%	4.43%	-0.66%	1.11%	2.67%	0.02%	-2.46%	18.10%	
D. Logan	17.81%	0.41%	6.40%	-0.76%	0.00%	0.00%	0.36%	-3.53%	20.69%	
E. Other Division B (2.5% COLA)	16.67%	-0.12%	3.71%	1.01%	-0.21%	0.00%	-0.07%	-2.16%	18.83%	
F. Other Division B (4% COLA)	16.67%	-0.12%	3.71%	1.01%	2.05%	2.90%	-0.07%	-3.11%	23.04%	
IV. Public Safety Noncontributory										
A. State	26.92%	-0.25%	5.33%	0.46%	0.00%	2.97%	-0.05%	-3.15%	32.23%	
B. Other Division A (2.5% COLA)	23.34%	0.52%	4.43%	-0.32%	-0.09%	0.00%	0.02%	-2.07%	25.83%	
C. Other Division A (4% COLA)	23.34%	0.52%	4.43%	-0.32%	0.36%	2.66%	0.02%	-2.46%	28.55%	
D. Salt Lake City	34.38%	-0.02%	5.87%	-0.69%	0.00%	0.00%	-0.09%	-4.01%	35.44%	
E. Ogden	33.11%	-0.10%	7.41%	-1.69%	0.00%	0.00%	0.08%	-4.29%	34.52%	
F. Provo	30.91%	0.08%	5.65%	-0.57%	0.00%	0.00%	0.11%	-3.48%	32.70%	
G. Logan	27.74%	0.41%	6.40%	-0.14%	0.00%	0.00%	0.36%	-3.53%	31.24%	
H. Bountiful	23.07%	-0.10%	7.26%	0.18%	0.00%	0.00%	-0.04%	-3.12%	27.25%	
I. Other Division B (2.5% COLA)	26.21%	-0.12%	3.71%	0.80%	-0.31%	0.00%	-0.07%	-2.16%	28.06%	
J. Other Division B (4% COLA)	26.21%	-0.12%	3.71%	0.80%	2.20%	2.90%	-0.07%	-3.11%	32.52%	
V. Firefighters										
A. Division A	10.78%	0.04%	3.34%	0.00%	0.00%	0.00%	0.11%	-1.32%	12.95%	
B. Division B	4.61%	0.11%	7.68%	-0.14%	0.00%	0.00%	0.12%	-2.41%	9.97%	
VI. Judges	30.77%	-0.14%	7.89%	1.23%	0.00%	0.00%	0.16%	-3.81%	36.10%	
VII. 3% Substantial Substitute	0.70%	-0.02%	0.06%	-0.02%	0.00%	0.00%	-0.01%	-0.11%	0.60%	

Notes: Rates shown as of Jan. 1, 2008 do not include any adjustments for 2008 legislation  
Rates shown include contribution for 3% Substantial Substitute, if applicable  
Rates shown do not include the offsets for court fees or for fire insurance premium taxes  
For paired funds, rates include asset rebalancing at each point of the analysis

Analysis of Change in UAAL

Fund/Division (1)	Changes in Unfunded Actuarial Accrued Liability Due To								Jan. 1, 2009 UAAL (10)
	Jan. 1, 2008 UAAL (2)	Amortization Payments (3)	Liability (Gain)\Loss (4)	Asset (Gain)\Loss (5)	Creation of 4% COLA Funds (6)	Change in Benefit Provisions (7)	Change in Assumptions or Methods (8)	Other Asset Transfers (9)	
I. Public Employees Contributory									
A. Local Government	25,273	(646)	4,424	45,204	0	0	(13,777)	(14,185)	46,293
B. State and School	42,871	(1,690)	7,368	93,326	0	0	(27,991)	(39,315)	74,568
C. Subtotal	68,144	(2,336)	11,792	138,530	0	0	(41,768)	(53,500)	120,861
II. Public Employees Noncontributory									
A. Local Government	52,877	(8,438)	22,609	355,495	0	0	(110,324)	14,185	326,403
B. State and School	468,350	(47,821)	193,764	1,683,300	0	0	(518,514)	39,315	1,818,394
C. Subtotal	521,227	(56,259)	216,373	2,038,795	0	0	(628,838)	53,500	2,144,797
III. Public Safety Contributory									
A. State	401	(384)	335	7,813	0	2,845	(2,150)	(8,064)	795
B. Other Division A (2.5% COLA)	3,942	1,567	(3,982)	20,950	(16,428)	0	(5,365)	4,753	5,437
C. Other Division A (4% COLA)	0	0	0	0	1,235	1,308	(1,096)	(1,098)	350
D. Logan	536	29	(27)	1,502	0	0	(440)	(748)	852
E. Other Division B (2.5% COLA)	4,742	893	(10,839)	6,950	(596)	0	(1,225)	757	683
F. Other Division B (4% COLA)	0	0	0	0	262	300	(278)	497	781
G. Subtotal	9,621	2,105	(14,513)	37,215	(15,527)	4,453	(10,554)	(3,903)	8,898
IV. Public Safety Noncontributory									
A. State	69,882	(1,870)	14,147	85,213	0	34,050	(26,498)	8,064	182,988
B. Other Division A (2.5% COLA)	43,078	(1,737)	11,469	86,507	(15,381)	0	(21,655)	(4,753)	97,528
C. Other Division A (4% COLA)	0	0	0	0	30,574	6,686	(5,342)	1,098	33,015
D. Salt Lake City	49,561	(394)	(756)	23,415	0	0	(7,234)	0	64,592
E. Ogden	9,161	74	(1,037)	6,115	0	0	(1,841)	0	12,471
F. Provo	5,772	68	713	4,145	0	0	(1,269)	0	9,430
G. Logan	2,183	102	(137)	914	0	0	(297)	748	3,514
H. Bountiful	395	(25)	76	2,081	0	0	(637)	0	1,890
I. Other Division B (2.5% COLA)	19,561	(1,411)	18,114	14,438	(7,357)	0	(4,432)	(757)	38,156
J. Other Division B (4% COLA)	0	0	0	0	7,691	1,131	(786)	(497)	7,538
K. Subtotal	199,593	(5,193)	42,589	222,828	15,527	41,867	(69,991)	3,903	451,122
V. Firefighters									
A. Division A	(1,793)	393	(122)	12,197	0	0	(3,913)	0	6,762
B. Division B	(53,041)	798	(4,235)	87,189	0	0	(26,723)	0	3,989
C. Subtotal	(54,834)	1,191	(4,357)	99,386	0	0	(30,636)	0	10,751
VI. Judges	5,532	115	2,857	16,387	0	0	(5,045)	0	19,845
VII. Governors and Legislative	(1,874)	(2)	997	1,454	0	0	(434)	0	141
VIII. 3% Substantial Substitute	304,881	(4,155)	3,159	24,365	(0)	961	(6,880)	0	322,331
IX. Grand Total	1,052,290	(64,535)	258,897	2,578,960	(0)	47,281	(794,146)	0	3,078,746

Note: Amounts shown are in \$ thousands  
Columns may not add to total due to rounding

**Actuarial Present Value of Future Benefits  
by Fund and Status**

Fund/Division	Retirees and Beneficiaries	Inactive Members	Active Members	Total
(1)	(2)	(3)	(4)	(5)
I. Public Employees Contributory				
A. Local Government	149,388	35,547	267,318	452,253
B. State and School	371,460	67,412	403,383	842,255
C. Subtotal	520,848	102,959	670,701	1,294,508
II. Public Employees Noncontributory				
A. Local Government	1,100,538	197,564	2,573,776	3,871,878
B. State and School	6,570,470	598,809	10,435,629	17,604,908
C. Subtotal	7,671,008	796,373	13,009,405	21,476,786
III. Public Safety Contributory				
A. State	57,787	1,289	3,888	62,964
B. Other Division A (2.5% COLA)	101,925	5,835	39,584	147,344
C. Other Division A (4% COLA)	26,688	638	2,021	29,346
D. Logan	10,467	184	2,897	13,547
E. Other Division B (2.5% COLA)	24,699	2,484	4,100	31,284
F. Other Division B (4% COLA)	5,099	394	2,600	8,093
G. Subtotal	226,665	10,824	55,090	292,578
IV. Public Safety Noncontributory				
A. State	418,158	20,515	631,856	1,070,529
B. Other Division A (2.5% COLA)	259,984	20,291	630,761	911,036
C. Other Division A (4% COLA)	65,231	4,273	159,452	228,955
D. Salt Lake City	148,741	3,185	144,360	296,286
E. Ogden	40,965	563	28,671	70,199
F. Provo	23,545	1,455	26,335	51,336
G. Logan	2,949	82	11,207	14,238
H. Bountiful	9,503	109	11,518	21,130
I. Other Division B (2.5% COLA)	47,613	3,980	167,271	218,863
J. Other Division B (4% COLA)	11,555	1,130	23,591	36,276
K. Subtotal	1,028,244	55,583	1,835,022	2,918,848
V. Firefighters				
A. Division A	40,114	1,998	146,416	188,528
B. Division B	397,682	3,816	505,256	906,754
C. Subtotal	437,796	5,814	651,672	1,095,282
VI. Judges	69,534	2,085	100,083	171,701
VII. Governors and Legislative	6,508	2,658	2,261	11,426
VIII. Grand Total	9,960,603	976,296	16,324,234	27,261,129

Notes: Amounts shown are in \$ thousands  
Columns may not add to total due to rounding

**Actuarial Present Value of Future Benefits  
Details for Retirees and Beneficiaries, by Status**

Fund/Division (1)	Retired Members (2)	Disabled Members (3)	Beneficiaries (4)	Total (5)
I. Public Employees Contributory				
A. Local Government	124,820	5,222	19,346	149,388
B. State and School	310,588	11,570	49,302	371,460
C. Subtotal	435,408	16,792	68,648	520,848
II. Public Employees Noncontributory				
A. Local Government	1,011,173	24,456	64,910	1,100,538
B. State and School	6,152,943	87,285	330,242	6,570,470
C. Subtotal	7,164,116	111,741	395,152	7,671,008
III. Public Safety Contributory				
A. State	40,526	2,444	14,816	57,787
B. Other Division A (2.5% COLA)	88,831	1,373	11,721	101,925
C. Other Division A (4% COLA)	22,278	224	4,186	26,688
D. Logan	10,250	107	109	10,467
E. Other Division B (2.5% COLA)	23,190	897	613	24,699
F. Other Division B (4% COLA)	4,832	0	267	5,099
G. Subtotal	189,907	5,045	31,712	226,665
IV. Public Safety Noncontributory				
A. State	396,612	5,219	16,327	418,158
B. Other Division A (2.5% COLA)	244,882	3,736	11,366	259,984
C. Other Division A (4% COLA)	62,930	0	2,301	65,231
D. Salt Lake City	134,518	3,270	10,953	148,741
E. Ogden	36,680	504	3,780	40,965
F. Provo	22,010	0	1,535	23,545
G. Logan	2,949	0	0	2,949
H. Bountiful	9,075	0	428	9,503
I. Other Division B (2.5% COLA)	45,027	956	1,630	47,613
J. Other Division B (4% COLA)	11,534	0	21	11,555
K. Subtotal	966,217	13,685	48,341	1,028,244
V. Firefighters				
A. Division A	31,446	5,182	3,485	40,114
B. Division B	341,406	19,089	37,187	397,682
C. Subtotal	372,852	24,271	40,672	437,796
VI. Judges	61,542	0	7,992	69,534
VII. Governors and Legislative	5,525	0	983	6,508
VIII. Grand Total	9,195,567	171,534	593,500	9,960,603

Notes: Amounts shown are in \$ thousands  
Columns may not add to total due to rounding



**Actuarial Present Value of Future Benefits  
Details for Inactive Members, by Status**

Fund/Division (1)	Disabled (2)	Other Vested (3)	Nonvested (4)	Total (5)
I. Public Employees Contributory				
A. Local Government	2,639	31,019	1,889	35,547
B. State and School	8,273	59,067	72	67,412
C. Subtotal	10,912	90,086	1,961	102,959
II. Public Employees Noncontributory				
A. Local Government	24,335	172,093	1,135	197,564
B. State and School	88,368	505,506	4,934	598,809
C. Subtotal	112,703	677,599	6,069	796,373
III. Public Safety Contributory				
A. State	0	1,279	10	1,289
B. Other Division A (2.5% COLA)	255	5,160	421	5,835
C. Other Division A (4% COLA)	0	627	11	638
D. Logan	0	172	11	184
E. Other Division B (2.5% COLA)	359	1,989	136	2,484
F. Other Division B (4% COLA)	264	131	0	394
G. Subtotal	878	9,358	589	10,824
IV. Public Safety Noncontributory				
A. State	2,218	18,283	14	20,515
B. Other Division A (2.5% COLA)	1,995	18,228	69	20,291
C. Other Division A (4% COLA)	295	3,978	0	4,273
D. Salt Lake City	624	2,560	1	3,185
E. Ogden	0	563	0	563
F. Provo	127	1,263	65	1,455
G. Logan	0	82	0	82
H. Bountiful	0	109	0	109
I. Other Division B (2.5% COLA)	507	3,457	16	3,980
J. Other Division B (4% COLA)	249	849	32	1,130
K. Subtotal	6,015	49,372	197	55,583
V. Firefighters				
A. Division A	0	1,762	236	1,998
B. Division B	0	3,536	280	3,816
C. Subtotal	0	5,298	516	5,814
VI. Judges	0	2,085	0	2,085
VII. Governors and Legislative	0	2,649	9	2,658
VIII. Grand Total	130,508	836,447	9,341	976,296

Notes: Amounts shown are in \$ thousands  
Columns may not add to total due to rounding

**Actuarial Present Value of Future Benefits  
Details for Active Members, by Benefit**

Fund/Division	Retirement	Deferred Termination	Disability	Refunds	Death	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
I. Public Employees Contributory						
A. Local Government	239,915	13,447	6,989	2,899	4,067	267,318
B. State and School	382,670	9,673	5,937	0	5,103	403,383
C. Subtotal	622,585	23,120	12,926	2,899	9,170	670,701
II. Public Employees Noncontributory						
A. Local Government	2,253,845	201,398	73,995	33	44,505	2,573,776
B. State and School	9,536,453	527,464	221,340	42	150,330	10,435,629
C. Subtotal	11,790,298	728,862	295,335	75	194,835	13,009,405
III. Public Safety Contributory						
A. State	3,870	0	0	0	18	3,888
B. Other Division A (2.5% COLA)	37,963	387	460	490	284	39,584
C. Other Division A (4% COLA)	1,960	16	19	11	15	2,021
D. Logan	2,768	40	37	28	24	2,897
E. Other Division B (2.5% COLA)	3,992	30	33	9	36	4,100
F. Other Division B (4% COLA)	2,474	37	42	18	29	2,600
G. Subtotal	53,027	510	591	556	406	55,090
IV. Public Safety Noncontributory						
A. State	600,626	13,530	11,699	0	6,001	631,856
B. Other Division A (2.5% COLA)	595,541	16,240	12,798	3	6,179	630,761
C. Other Division A (4% COLA)	150,813	3,995	3,119	1	1,524	159,452
D. Salt Lake City	137,964	2,701	2,157	0	1,537	144,360
E. Ogden	27,057	703	566	0	344	28,671
F. Provo	24,986	581	462	6	300	26,335
G. Logan	10,739	208	153	0	108	11,207
H. Bountiful	11,096	172	149	0	101	11,518
I. Other Division B (2.5% COLA)	158,363	3,815	3,095	5	1,993	167,271
J. Other Division B (4% COLA)	22,524	445	363	0	259	23,591
K. Subtotal	1,739,709	42,390	34,561	15	18,346	1,835,022
V. Firefighters						
A. Division A	137,480	298	6,060	713	1,865	146,416
B. Division B	481,777	581	13,572	1,602	7,724	505,256
C. Subtotal	619,257	879	19,632	2,315	9,589	651,672
VI. Judges	98,165	0	0	0	1,917	100,083
VII. Governors and Legislative	1,504	733	0	0	23	2,261
VIII. Grand Total	14,924,545	796,494	363,045	5,860	234,286	16,324,234

Notes: Amounts shown are in \$ thousands  
Columns may not add to total due to rounding

**Actuarial Present Value of Future Benefits**  
**Details for Members Receiving Benefits, by Benefit**

Fund/Division (1)	Basic Benefit (2)	COLA (3)	Subtotal (2) + (3) (4)	ROPP (5)	Total (4) + (5) (6)
I. Public Employees Contributory					
A. Local Government	100,533	48,555	149,088	300	149,388
B. State and School	237,060	132,765	369,825	1,635	371,460
C. Subtotal	337,593	181,320	518,913	1,935	520,848
II. Public Employees Noncontributory					
A. Local Government	766,087	334,451	1,100,538	0	1,100,538
B. State and School	4,529,913	2,040,557	6,570,470	0	6,570,470
C. Subtotal	5,296,000	2,375,008	7,671,008	0	7,671,008
III. Public Safety Contributory					
A. State	31,069	25,028	56,097	1,690	57,787
B. Other Division A (2.5% COLA)	67,890	33,414	101,304	620	101,925
C. Other Division A (4% COLA)	15,757	10,931	26,688	0	26,688
D. Logan	7,336	3,126	10,462	5	10,467
E. Other Division B (2.5% COLA)	18,016	6,681	24,697	3	24,699
F. Other Division B (4% COLA)	3,379	1,720	5,099	0	5,099
G. Subtotal	143,447	80,900	224,347	2,318	226,665
IV. Public Safety Noncontributory					
A. State	286,505	131,649	418,154	4	418,158
B. Other Division A (2.5% COLA)	189,047	70,937	259,984	0	259,984
C. Other Division A (4% COLA)	45,584	19,647	65,231	0	65,231
D. Salt Lake City	99,945	48,368	148,313	428	148,741
E. Ogden	28,212	12,681	40,893	72	40,965
F. Provo	16,405	7,083	23,488	57	23,545
G. Logan	2,262	687	2,949	0	2,949
H. Bountiful	6,732	2,755	9,487	16	9,503
I. Other Division B (2.5% COLA)	34,908	12,705	47,613	0	47,613
J. Other Division B (4% COLA)	8,320	3,235	11,555	0	11,555
K. Subtotal	717,920	309,747	1,027,667	577	1,028,244
V. Firefighters					
A. Division A	27,011	12,920	39,931	183	40,114
B. Division B	256,139	138,762	394,901	2,781	397,682
C. Subtotal	283,150	151,682	434,832	2,964	437,796
VI. Judges	43,630	25,904	69,534	0	69,534
VII. Governors and Legislative	3,425	1,765	5,190	1,318	6,508
VIII. Grand Total	6,825,165	3,126,326	9,951,491	9,112	9,960,603

Notes: Amounts shown are in \$ thousands  
Columns may not add to total due to rounding

Normal Cost

Fund/Division (1)	Retirement (2)	Deferred Termination (3)	Disability (4)	Refunds (5)	Death (6)	Total (7)
I. Public Employees Contributory						
A. Local Government	7.37%	1.32%	0.74%	1.33%	0.20%	10.96%
B. State and School	6.43%	1.05%	0.58%	1.81%	0.16%	10.03%
II. Public Employees Noncontributory						
A. Local Government	8.52%	1.78%	0.54%	0.00%	0.20%	11.04%
B. State and School	9.61%	1.47%	0.46%	0.00%	0.18%	11.72%
III. Public Safety Contributory						
A. State	20.31%	0.73%	1.31%	1.14%	0.40%	23.89%
B. Other Division A (2.5% COLA)	19.21%	0.61%	0.84%	1.43%	0.28%	22.37%
C. Other Division A (4% COLA)	20.67%	0.69%	1.03%	1.21%	0.34%	23.94%
D. Logan	18.85%	0.53%	0.60%	1.53%	0.32%	21.83%
E. Other Division B (2.5% COLA)	19.47%	0.65%	0.99%	1.10%	0.48%	22.69%
F. Other Division B (4% COLA)	20.27%	0.60%	0.86%	1.21%	0.42%	23.36%
IV. Public Safety Noncontributory						
A. State	20.22%	1.08%	1.01%	0.00%	0.32%	22.63%
B. Other Division A (2.5% COLA)	19.23%	1.00%	0.83%	0.00%	0.28%	21.34%
C. Other Division A (4% COLA)	19.94%	1.02%	0.86%	0.00%	0.28%	22.10%
D. Salt Lake City	19.26%	0.97%	0.81%	0.00%	0.40%	21.44%
E. Ogden	19.23%	0.98%	0.84%	0.00%	0.41%	21.46%
F. Provo	19.33%	0.99%	0.85%	0.00%	0.42%	21.59%
G. Logan	19.26%	0.93%	0.70%	0.00%	0.36%	21.25%
H. Bountiful	19.41%	0.99%	0.86%	0.00%	0.29%	21.55%
I. Other Division B (2.5% COLA)	19.22%	0.97%	0.82%	0.00%	0.41%	21.42%
J. Other Division B (4% COLA)	20.02%	1.01%	0.88%	0.00%	0.43%	22.34%
V. Firefighters						
A. Division A	23.64%	0.12%	1.76%	0.47%	0.41%	26.40%
B. Division B	23.77%	0.10%	1.47%	0.50%	0.54%	26.38%
VI. Judges	26.29%	0.00%	0.00%	0.00%	1.02%	27.31%

Note: Columns may not add to total due to rounding

Net Employer Normal Cost

Fund/Division (1)	Total Normal Cost (2)	Member Rate (3)	Net Employer Normal Cost (2) - (3) (4)
I. Public Employees Contributory			
A. Local Government	10.96%	6.00%	4.96%
B. State and School	10.03%	6.00%	4.03%
II. Public Employees Noncontributory			
A. Local Government	11.04%	0.00%	11.04%
B. State and School	11.72%	0.00%	11.72%
III. Public Safety Contributory			
A. State	23.89%	12.29%	11.60%
B. Other Division A (2.5% COLA)	22.37%	12.29%	10.08%
C. Other Division A (4% COLA)	23.94%	12.29%	11.65%
D. Logan	21.83%	11.13%	10.70%
E. Other Division B (2.5% COLA)	22.69%	10.50%	12.19%
F. Other Division B (4% COLA)	23.36%	10.50%	12.86%
IV. Public Safety Noncontributory			
A. State	22.63%	0.00%	22.63%
B. Other Division A (2.5% COLA)	21.34%	0.00%	21.34%
C. Other Division A (4% COLA)	22.10%	0.00%	22.10%
D. Salt Lake City	21.44%	0.00%	21.44%
E. Ogden	21.46%	0.00%	21.46%
F. Provo	21.59%	0.00%	21.59%
G. Logan	21.25%	0.00%	21.25%
H. Bountiful	21.55%	0.00%	21.55%
I. Other Division B (2.5% COLA)	21.42%	0.00%	21.42%
J. Other Division B (4% COLA)	22.34%	0.00%	22.34%
V. Firefighters			
A. Division A	26.40%	15.05%	11.35%
B. Division B	26.38%	16.71%	9.67%
VI. Judges	27.31%	0.00%	27.31%

**Determination of Actuarial Accrued Liability**

Fund/Division	Actuarial Present Value of Future Benefits	Actuarial Present Value of Future Normal Costs			Actuarial Accrued Liability (2) - (5)
		Members	Employers	Total	
(1)	(2)	(3)	(4)	(5)	(6)
I. Public Employees Contributory					
A. Local Government	452,253	25,916	21,424	47,340	404,913
B. State and School	842,255	17,106	11,490	28,596	813,659
C. Subtotal	1,294,508	43,022	32,914	75,936	1,218,572
II. Public Employees Noncontributory					
A. Local Government	3,871,878	0	801,550	801,550	3,070,328
B. State and School	17,604,908	0	2,862,965	2,862,965	14,741,943
C. Subtotal	21,476,786	0	3,664,515	3,664,515	17,812,271
III. Public Safety Contributory					
A. State	62,964	183	172	355	62,609
B. Other Division A (2.5% COLA)	147,344	6,884	5,645	12,529	134,814
C. Other Division A (4% COLA)	29,346	254	240	494	28,852
D. Logan	13,547	483	464	947	12,601
E. Other Division B (2.5% COLA)	31,284	342	398	740	30,544
F. Other Division B (4% COLA)	8,093	385	471	856	7,237
G. Subtotal	292,578	8,531	7,390	15,921	276,657
IV. Public Safety Noncontributory					
A. State	1,070,529	0	233,169	233,169	837,361
B. Other Division A (2.5% COLA)	911,036	0	267,380	267,380	643,656
C. Other Division A (4% COLA)	228,955	0	63,485	63,485	165,470
D. Salt Lake City	296,286	0	50,853	50,853	245,433
E. Ogden	70,199	0	11,719	11,719	58,480
F. Provo	51,336	0	10,166	10,166	41,170
G. Logan	14,238	0	4,047	4,047	10,191
H. Bountiful	21,130	0	3,302	3,302	17,829
I. Other Division B (2.5% COLA)	218,863	0	69,139	69,139	149,724
J. Other Division B (4% COLA)	36,276	0	8,580	8,580	27,696
K. Subtotal	2,918,848	0	721,840	721,840	2,197,010
V. Firefighters					
A. Division A	188,528	47,863	36,097	83,960	104,568
B. Division B	906,754	148,667	86,033	234,700	672,054
C. Subtotal	1,095,282	196,530	122,130	318,660	776,622
VI. Judges	171,701	0	25,736	25,736	145,965
VII. Governors and Legislative	11,426	0	445	445	10,982
VIII. Grand Total	27,261,129	248,083	4,574,970	4,823,053	22,438,079

Notes: Amounts shown are in \$ thousands  
Columns may not add to total due to rounding

**Actuarial Accrued Liability  
Details of Member and Employer Financing**

Fund/Division	Inactive Members			Active Members		
	Accumulated	Employer	Total	Accumulated	Employer	Total
	Member	Financed		Member	Financed	
(1)	Contributions	(3)	(4)	(5)	(6)	(7)
I. Public Employees Contributory						
A. Local Government	30,621	4,926	35,547	93,447	126,531	219,978
B. State and School	56,669	10,743	67,412	153,995	220,792	374,787
C. Subtotal	87,290	15,669	102,959	247,442	347,323	594,765
II. Public Employees Noncontributory						
A. Local Government	36,345	161,219	197,564	117,078	1,655,148	1,772,226
B. State and School	101,068	497,741	598,809	444,823	7,127,841	7,572,664
C. Subtotal	137,413	658,960	796,373	561,901	8,782,989	9,344,890
III. Public Safety Contributory						
A. State	766	523	1,289	1,478	2,055	3,533
B. Other Division A (2.5% COLA)	5,325	510	5,835	12,542	14,512	27,054
C. Other Division A (4% COLA)	580	58	638	657	870	1,527
D. Logan	184	0	184	740	1,210	1,950
E. Other Division B (2.5% COLA)	1,942	542	2,484	1,292	2,068	3,360
F. Other Division B (4% COLA)	222	172	394	661	1,083	1,744
G. Subtotal	9,019	1,805	10,824	17,370	21,798	39,168
IV. Public Safety Noncontributory						
A. State	1,626	18,889	20,515	6,471	392,217	398,688
B. Other Division A (2.5% COLA)	3,296	16,995	20,291	18,811	344,570	363,381
C. Other Division A (4% COLA)	767	3,506	4,273	2,920	93,046	95,966
D. Salt Lake City	197	2,988	3,185	2,681	90,826	93,507
E. Ogden	148	415	563	883	16,069	16,952
F. Provo	1,224	231	1,455	7,065	9,104	16,169
G. Logan	71	11	82	2,274	4,886	7,160
H. Bountiful	0	109	109	368	7,849	8,217
I. Other Division B (2.5% COLA)	800	3,180	3,980	9,671	88,461	98,132
J. Other Division B (4% COLA)	436	694	1,130	1,878	13,133	15,011
K. Subtotal	8,565	47,018	55,583	53,022	1,060,161	1,113,183
V. Firefighters						
A. Division A	1,483	515	1,998	16,041	46,415	62,456
B. Division B	2,845	971	3,816	71,214	199,342	270,556
C. Subtotal	4,328	1,486	5,814	87,255	245,757	333,012
VI. Judges	631	1,454	2,085	7,107	67,240	74,347
VII. Governors and Legislative	118	2,540	2,658	1	1,815	1,816
VIII. Grand Total	247,364	728,932	976,296	974,098	10,527,083	11,501,181

Notes: Amounts shown are in \$ thousands  
Columns may not add to total due to rounding

Number of Members

Fund/Division (1)	Active (2)	Inactive Members			Members Receiving Benefits			Total (9)
		Disabled (3)	Vested (4)	Nonvested (5)	Regular Retirees (6)	Disabled Retirees (7)	Beneficiaries (8)	
I. Public Employees Contributory								
A. Local Government	1,379	14	845	755	1,021	55	292	4,361
B. State and School	1,322	48	796	18	3,085	152	803	6,224
C. Subtotal	2,701	62	1,641	773	4,106	207	1,095	10,585
II. Public Employees Noncontributory								
A. Local Government	20,052	211	9,389	429	4,683	160	476	35,400
B. State and School	73,581	685	26,434	1,176	24,172	622	1,991	128,661
C. Subtotal	93,633	896	35,823	1,605	28,855	782	2,467	164,061
III. Public Safety Contributory								
A. State	10	0	21	14	179	16	137	377
B. Other Division A (2.5% COLA)	143	2	198	76	306	9	109	843
C. Other Division A (4% COLA)	7	0	27	5	106	1	40	186
D. Logan	10	0	4	1	28	1	1	45
E. Other Division B (2.5% COLA)	10	1	56	22	57	5	8	159
F. Other Division B (4% COLA)	8	1	3	0	22	0	2	36
G. Subtotal	188	4	309	118	698	32	297	1,646
IV. Public Safety Noncontributory								
A. State	2,638	11	1,079	3	1,003	23	98	4,855
B. Other Division A (2.5% COLA)	2,817	9	1,082	6	637	18	58	4,627
C. Other Division A (4% COLA)	661	2	225	0	159	0	13	1,060
D. Salt Lake City	480	2	108	1	344	18	83	1,036
E. Ogden	120	0	48	0	112	2	30	312
F. Provo	95	1	23	11	53	0	12	195
G. Logan	47	0	6	0	5	0	0	58
H. Bountiful	38	0	7	0	25	0	4	74
I. Other Division B (2.5% COLA)	669	3	204	3	110	3	8	1,000
J. Other Division B (4% COLA)	77	1	18	1	22	0	1	120
K. Subtotal	7,642	29	2,800	25	2,470	64	307	13,337
V. Firefighters								
A. Division A	487	0	105	45	80	18	18	753
B. Division B	1,365	0	117	103	736	67	201	2,589
C. Subtotal	1,852	0	222	148	816	85	219	3,342
VI. Judges	110	0	5	0	67	0	30	212
VII. Governors and Legislative	91	0	106	5	156	0	66	424
VIII. Grand Total	106,217	991	40,906	2,674	37,168	1,170	4,481	193,607



Active Membership Statistics

Fund/Division (1)	Number (2)	Total Compensation \$ Thousands (3)	Average Compensation (\$'s) (4)	Accumulated Member Contributions With Interest \$ Thousands (5)	Average Age (6)	Average Service (7)
I. Public Employees Contributory						
A. Local Government	1,379	64,039	46,439	93,447	48.3	14.5
B. State and School	1,322	64,931	49,116	153,995	55.4	26.4
C. Subtotal	2,701	128,970	47,749	247,442	51.8	20.3
II. Public Employees Noncontributory						
A. Local Government	20,052	877,481	43,760	117,078	44.4	9.1
B. State and School	73,581	2,960,453	40,234	444,823	45.0	10.2
C. Subtotal	93,633	3,837,934	40,989	561,901	44.9	10.0
III. Public Safety Contributory						
A. State	10	521	52,141	1,478	56.4	21.7
B. Other Division A (2.5% COLA)	143	7,108	49,709	12,542	41.6	11.6
C. Other Division A (4% COLA)	7	319	45,611	657	45.7	14.1
D. Logan	10	501	50,088	740	37.7	12.5
E. Other Division B (2.5% COLA)	10	607	60,690	1,292	48.7	17.9
F. Other Division B (4% COLA)	8	451	56,381	661	41.8	12.1
G. Subtotal	188	9,507	50,569	17,370	24.8	12.6
IV. Public Safety Noncontributory						
A. State	2,638	119,247	45,204	6,471	40.5	9.5
B. Other Division A (2.5% COLA)	2,817	127,213	45,159	18,811	37.5	8.4
C. Other Division A (4% COLA)	661	30,009	45,399	2,920	37.8	9.3
D. Salt Lake City	480	27,085	56,427	2,681	39.0	10.1
E. Ogden	120	5,595	46,628	883	37.6	9.0
F. Provo	95	4,976	52,384	7,065	37.7	9.3
G. Logan	47	2,064	43,906	2,274	36.7	9.8
H. Bountiful	38	1,948	51,269	368	41.7	11.9
I. Other Division B (2.5% COLA)	669	33,703	50,378	9,671	37.6	8.2
J. Other Division B (4% COLA)	77	4,346	56,441	1,878	38.6	9.2
K. Subtotal	7,642	356,186	46,609	53,022	38.7	9.0
V. Firefighters						
A. Division A	487	24,673	50,663	16,041	38.5	7.4
B. Division B	1,365	76,835	56,289	71,214	39.6	11.1
C. Subtotal	1,852	101,508	54,810	87,255	39.3	10.1
VI. Judges	110	14,347	130,423	7,107	56.9	12.1
VII. Governors and Legislative	91	532	5,850	1	53.1	6.4
VIII. Grand Total	106,217	4,448,984	41,886	974,098	44.6	10.2

**Retired Member Statistics**  
**(Including Disabled Retirees and Beneficiaries)**

Fund/Division (1)	Number (2)	Annual Total Benefits (\$ Thousands) (3)	Average Monthly Benefit (\$'s) (4)
I. Public Employees Contributory			
A. Local Government	1,368	14,863	905
B. State and School	4,040	43,455	896
C. Subtotal	5,408	58,318	899
II. Public Employees Noncontributory			
A. Local Government	5,319	92,408	1,448
B. State and School	26,785	550,026	1,711
C. Subtotal	32,104	642,434	1,668
III. Public Safety Contributory			
A. State	332	5,813	1,459
B. Other Division A (2.5% COLA)	424	8,455	1,662
C. Other Division A (4% COLA)	147	2,402	1,362
D. Logan	30	798	2,217
E. Other Division B (2.5% COLA)	70	1,695	2,018
F. Other Division B (4% COLA)	24	368	1,279
G. Subtotal	1,027	19,531	1,585
IV. Public Safety Noncontributory			
A. State	1,124	30,078	2,230
B. Other Division A (2.5% COLA)	713	19,089	2,231
C. Other Division A (4% COLA)	172	4,414	2,139
D. Salt Lake City	445	12,022	2,251
E. Ogden	144	3,171	1,835
F. Provo	65	1,857	2,380
G. Logan	5	192	3,195
H. Bountiful	29	728	2,091
I. Other Division B (2.5% COLA)	121	3,289	2,265
J. Other Division B (4% COLA)	23	762	2,762
K. Subtotal	2,841	75,602	2,218
V. Firefighters			
A. Division A	116	2,931	2,106
B. Division B	1,004	31,054	2,577
C. Subtotal	1,120	33,985	2,529
VI. Judges	97	6,190	5,318
VII. Governors and Legislative	222	580	218
VIII. Grand Total	42,819	836,640	1,628

**Market Value of Assets**  
**(All Retirement Systems Combined)**

Item	December 31, 2007	December 31, 2008
(1)	(2)	(2)
1. Cash	1,213	3,479
2. Receivables:		
a. Member contributions	1,165	858
b. Employer contributions	36,451	35,605
c. Fire insurance premium tax & court fees	3,151	230
d. Investments	<u>410,110</u>	<u>377,506</u>
e. Total	450,877	414,199
3. Investments		
a. Short-term securities – domestic	1,506,772	1,034,442
b. Short-term securities - international	6,116	6,256
c. Bonds - domestic	4,787,027	3,940,429
d. Bonds - international	573,227	637,127
e. Equities - domestic	5,974,362	3,245,247
f. Equities - international	3,011,184	1,874,535
g. Alternative investments	3,341,953	3,539,740
h. Real estate	3,771,930	3,280,056
i. Mortgage loans	<u>6,845</u>	<u>6,845</u>
j. Total	22,979,416	17,564,677
4. Other	1,817,640	1,105,879
5. Total assets	25,249,146	19,088,234
6. Liabilities		
a. Securities lending liability	(1,816,825)	(1,105,354)
b. Other accounting liabilities	(2,466,126)	(2,084,288)
c. Reserves	<u>(15,539)</u>	<u>(15,665)</u>
d. Total	(4,298,490)	(3,205,307)
7. Net assets	20,950,656	15,882,927

Note: Assets exclude 401(k) and 457 plans

Amounts shown are in \$ thousands

Amounts shown are from the December 31, 2008 Comprehensive Annual Financial Report and may differ from other numbers contained in this report due to rounding.

**Reconciliation of Market Value of Assets (MVA)**

Fund/Division (1)	MVA as of Dec. 31, 2007 (2)	Contributions (3)	Benefits and Refunds (4)	Earnings, Net of Expenses (5)	Transfers (6)	MVA as of Dec. 31, 2008 (7)
<b>I. Public Employees Contributory</b>						
A. Local Government	364,665	9,092	(16,023)	(85,220)	3,034	275,548
B. State and School	766,651	11,355	(47,546)	(176,612)	5,974	559,821
C. Subtotal	1,131,316	20,447	(63,569)	(261,832)	9,008	835,369
<b>II. Public Employees Noncontributory</b>						
A. Local Government	2,874,693	103,406	(96,608)	(672,004)	(3,000)	2,206,487
B. State and School	13,700,644	406,689	(565,619)	(3,183,924)	12,501	10,370,291
C. Subtotal	16,575,337	510,095	(662,226)	(3,855,929)	9,501	12,576,779
<b>III. Public Safety Contributory</b>						
A. State	62,531	528	(6,126)	(14,444)	510	42,999
B. Other Division A (2.5% COLA)	189,319	1,782	(11,715)	(37,963)	(24,855)	116,568
C. Other Division A (4% COLA)	0	0	0	0	0	0
D. Logan	15,219	129	(817)	(2,858)	(2,872)	8,801
E. Other Division B (2.5% COLA)	52,600	1,035	(2,200)	(10,881)	(10,774)	29,780
F. Other Division B (4% COLA)	0	0	0	0	0	0
G. Subtotal	319,669	3,474	(20,857)	(66,146)	(37,991)	198,148
<b>IV. Public Safety Noncontributory</b>						
A. State	692,245	30,546	(31,444)	(161,514)	116	529,949
B. Other Division A (2.5% COLA)	680,157	36,010	(24,698)	(165,657)	26,790	552,602
C. Other Division A (4% COLA)	0	0	0	0	0	0
D. Salt Lake City	190,793	9,747	(12,512)	(44,367)	1,012	144,673
E. Ogden	50,175	1,786	(3,336)	(11,529)	(289)	36,807
F. Provo	33,704	1,487	(2,052)	(7,822)	75	25,392
G. Logan	4,375	505	(147)	(1,695)	2,902	5,940
H. Bountiful	16,967	437	(741)	(3,932)	21	12,752
I. Other Division B (2.5% COLA)	118,213	8,927	(4,048)	(29,526)	11,090	104,656
J. Other Division B (4% COLA)	0	0	0	0	0	0
K. Subtotal	1,786,629	89,443	(78,977)	(426,041)	41,718	1,412,771
<b>V. Firefighters</b>						
A. Division A	99,116	5,640	(3,109)	(23,200)	(202)	78,244
B. Division B	715,558	15,007	(32,534)	(165,273)	1,693	534,452
C. Subtotal	814,674	20,647	(35,643)	(188,473)	1,491	612,696
<b>VI. Judges</b>	134,366	3,940	(6,581)	(31,124)	295	100,896
<b>VII. Governors and Legislative</b>	12,195	0	(772)	(2,768)	17	8,673
<b>VIII. 3% Substantial Substitute</b>	176,467	26,747	(81)	(41,504)	(24,039)	137,590
<b>IX. Grand Total</b>	20,950,653	674,793	(868,707)	(4,873,817)	0	15,882,922

Notes: Amounts shown are in \$ thousands  
Columns may not add to total due to rounding

**Investment Return Rates for Prior Year**

	Basis of Assets	
	Market Value (1)	Actuarial Value (2)
1. Beginning of year assets	20,950,653	20,269,043
2. Contributions to fund during year	674,793	674,793
3. Benefit payments during year (including refunds of contributions)	(868,707)	(868,707)
4. Transfers to and (from) URS	0	0
5. Investment income, net of investment and administrative expenses	(4,873,817)	(221,476)
6. End of year assets	15,882,922	19,853,653
7. Investment return rate	-23.4%	-1.1%

Note: Amounts shown are in \$ thousands

The return on the actuarial value of assets reflects the change in the corridor from 80%-120% to 75%-125%

**Summary of Investment Return Rates**

Year	Return on Market Value	Return on Actuarial Value
(1)	(2)	(3)
1991	21.5%	11.4%
1992	4.3%	10.5%
1993	15.7%	13.8%
1994	0.0%	8.8%
1995	21.4%	11.6%
1996	14.7%	11.7%
1997	15.8%	13.7%
1998	9.4%	12.6%
1999	16.3%	14.7%
2000	1.8%	11.2%
2001	-5.3%	6.8%
2002	-8.0%	-1.5%
2003	25.6%	8.0%
2004	13.7%	5.3%
2005	9.2%	7.4%
2006	14.4%	11.1%
2007	6.6%	13.0%
2008	-23.4%	-1.1%
Average return		
Last 5 years:	3.0%	7.0%
Last 10 years:	4.2%	7.4%
Last 15 years:	6.7%	8.8%

**Calculation of Actuarial Value of Assets  
 (All Retirement Systems Combined)**

1. Market value of assets 15,882,922

2. Adjustments to smooth asset values based on  
 excess/shortfall of expected investment income for:

<u>Year</u>	<u>Total Excess/(Shortfall)</u>	<u>Weight Subtracted</u>	<u>Weighted Amount</u>
a. 2008	(6,489,978)	80%	(5,191,982)
b. 2007	(286,308)	60%	(171,785)
c. 2006	1,116,942	40%	446,777
d. 2005	199,197	20%	39,839
e. 2004	804,061	0%	<u>0</u>
f. Total			(4,877,151)

3. Preliminary actuarial value of assets (1-2f) 20,760,073

4. Corridor Limits

a. 75% of market value 11,912,192

b. 125% of market value 19,853,653

c. Actuarial value (Item 3, not more than 4b, not less than 4a) 19,853,653

5. Ratio of actuarial value to market value 125.0%

Note: Amounts shown are in \$ thousands

Transfer Adjustments to Asset Values

Fund/Division (1)	Market Value of Assets (MVA) at January 1, 2009			Actuarial Value of Assets (AVA) at January 1, 2009		
	MVA Before Transfer	Transfer Amount	MVA After Transfer	AVA Before Transfer	Transfer Amount	AVA After Transfer
	(2)	(3)	(4)	(5)	(6)	(7)
<b>I. Public Employees Contributory</b>						
A. Local Government	275,548	11,348	286,896	344,435	14,185	358,620
B. State and School	559,821	31,452	591,273	699,776	39,315	739,091
C. Subtotal	835,369	42,800	878,169	1,044,211	53,500	1,097,711
<b>II. Public Employees Noncontributory</b>						
A. Local Government	2,206,487	(11,348)	2,195,139	2,758,109	(14,185)	2,743,924
B. State and School	10,370,291	(31,452)	10,338,839	12,962,864	(39,315)	12,923,549
C. Subtotal	12,576,779	(42,800)	12,533,979	15,720,973	(53,500)	15,667,473
<b>III. Public Safety Contributory</b>						
A. State	42,999	6,451	49,450	53,749	8,064	61,813
B. Other Division A (2.5% COLA)	116,568	(25,726)	90,842	161,536	(32,158)	129,378
C. Other Division A (4% COLA)	0	22,802	22,802	0	28,503	28,503
D. Logan	8,801	598	9,399	11,001	748	11,749
E. Other Division B (2.5% COLA)	29,780	(6,169)	23,611	37,572	(7,711)	29,861
F. Other Division B (4% COLA)	0	5,166	5,166	0	6,457	6,457
G. Subtotal	198,148	3,122	201,270	263,858	3,903	267,761
<b>IV. Public Safety Noncontributory</b>						
A. State	529,949	(6,451)	523,498	662,437	(8,064)	654,373
B. Other Division A (2.5% COLA)	552,602	(103,039)	449,563	674,927	(128,799)	546,128
C. Other Division A (4% COLA)	0	105,963	105,963	0	132,454	132,454
D. Salt Lake City	144,673	0	144,673	180,841	0	180,841
E. Ogden	36,807	0	36,807	46,009	0	46,009
F. Provo	25,392	0	25,392	31,740	0	31,740
G. Logan	5,940	(598)	5,342	7,425	(748)	6,677
H. Bountiful	12,752	0	12,752	15,939	0	15,939
I. Other Division B (2.5% COLA)	104,656	(15,123)	89,533	130,472	(18,904)	111,568
J. Other Division B (4% COLA)	0	16,126	16,126	0	20,158	20,158
K. Subtotal	1,412,771	(3,122)	1,409,649	1,749,790	(3,903)	1,745,887
<b>V. Firefighters</b>						
A. Division A	78,244	0	78,244	97,806	0	97,806
B. Division B	534,452	0	534,452	668,065	0	668,065
C. Subtotal	612,696	0	612,696	765,871	0	765,871
<b>VI. Judges</b>	100,896	0	100,896	126,120	0	126,120
<b>VII. Governors and Legislative</b>	8,673	0	8,673	10,841	0	10,841
<b>VIII. 3% Substantial Substitute</b>	137,590	0	137,590	171,988	0	171,988
<b>IX. Grand Total</b>	15,882,922	0	15,882,922	19,853,652	0	19,853,652

Notes: Amounts shown are in \$ thousands  
Columns may not add to total due to rounding



**Actuarially Determined Contribution Rate for 3% Substantial Substitute**

1. Actuarial accrued liability, all funds combined	
a. Retirees	286,030
b. Inactives	14,321
c. Actives	<u>193,968</u>
d. Total	494,319
2. Actuarial value of assets	171,988
3. Unfunded actuarial accrued liability	322,331
4. Covered compensation of state funds that will pay for benefit	3,250,902
5. Calculated rate (25-year funding period and 4.00% PGR)	0.60%

Notes: Amounts shown are in \$ thousands

Columns may not add to total due to rounding

**Liabilities for 3% Substantial Substitute**

Fund/Division (1)	Retirees and Beneficiaries (2)	Inactive Members (3)	Active Members (4)	Total (5)
I. Public Employees Contributory				
A. Local Government	4,364	825	6,102	11,291
B. State and School	11,052	2,008	12,097	25,156
C. Subtotal	15,416	2,833	18,199	36,447
II. Public Employees Noncontributory				
A. Local Government	30,521	2,606	26,595	59,722
B. State and School	189,091	7,989	131,043	328,123
C. Subtotal	219,612	10,595	157,638	387,845
III. Public Safety Contributory				
A. State	1,675	37	117	1,829
B. Other Division A (2.5% COLA)	2,963	83	490	3,537
C. Other Division A (4% COLA)	780	15	22	817
D. Logan	314	1	0	314
E. Other Division B (2.5% COLA)	723	33	44	800
F. Other Division B (4% COLA)	153	4	0	157
G. Subtotal	6,608	173	673	7,454
IV. Public Safety Noncontributory				
A. State	12,179	232	4,254	16,664
B. Other Division A (2.5% COLA)	7,461	180	3,069	10,710
C. Other Division A (4% COLA)	1,821	47	648	2,516
D. Salt Lake City	4,383	34	991	5,408
E. Ogden	1,216	4	180	1,399
F. Provo	680	17	197	894
G. Logan	88	0	73	161
H. Bountiful	285	3	136	423
I. Other Division B (2.5% COLA)	1,373	56	791	2,220
J. Other Division B (4% COLA)	347	18	230	595
K. Subtotal	29,833	591	10,569	40,990
V. Firefighters				
A. Division A	1,041	20	821	1,882
B. Division B	11,520	44	4,474	16,037
C. Subtotal	12,561	64	5,295	17,919
VI. Judges	1,871	23	1,580	3,474
VII. Governors and Legislative	130	44	16	189
VIII. Grand Total	286,031	14,323	193,970	494,318

Notes: Amounts shown are in \$ thousands  
Columns may not add to total due to rounding

**Governors and Legislative Pension Plan  
Determination of Contribution**

1. Actuarial Accrued Liability	
a. Retirees	6,507,742
b. Inactives	2,658,037
c. Actives	<u>1,815,982</u>
d. Total	10,981,761
2. Actuarial Value of Assets	10,841,000
3. Unfunded Actuarial Accrued Liability (UAAL) (1d) - (2)	140,761
4. Normal Cost	119,656
5. Total Recommended Appropriation Payable by June 30, 2011	
a. Normal Cost	119,656
b. Amortization Charge	<u>12,469</u>
c. Subtotal	132,125
d. Interest Adjustment (two years at 7.75%)	<u>21,273</u>
e. Total	153,398

**Historical Summary of Statistical Data  
Public Employees Retirement System  
(Contributory)**

Plan Year Beginning January 1st	Participant Counts				Covered Payroll (\$ Thousands)	Average Pay (7)	Retirement Benefits in Force Annual Amount (\$ Thousands)	Average Retiree Monthly Benefit (9)	Market Value of Assets (\$ Thousands)	Actuarial Value of Assets (\$ Thousands)
	Active (2)	Inactive (3)	Retired (4)	Total (5)						
1990	20,773	8,984	13,029	42,786	428,720	20,638	55,504	355	Not Available	954,900
1991	15,784	892	12,331	29,007	340,524	21,574	56,673	383	803,332	796,016
1992	12,430	1,629	12,275	26,334	287,907	23,162	57,306	389	867,300	785,115
1993	11,405	1,497	11,858	24,760	283,299	24,840	57,608	405	833,053	800,806
1994	10,826	1,733	11,444	24,003	280,655	25,924	57,861	421	929,993	880,979
1995	10,421	1,805	11,115	23,341	284,657	27,316	58,345	437	922,155	935,845
1996	6,954	2,028	10,645	19,627	195,717	28,145	58,238	456	919,007	852,034
1997	4,673	1,906	10,176	16,755	135,083	28,907	57,770	473	859,304	772,977
1998	4,396	1,975	9,724	16,095	134,341	30,560	57,496	493	916,532	809,388
1999	4,144	2,089	9,208	15,441	133,440	32,201	56,599	512	927,169	840,215
2000	3,967	2,134	8,717	14,818	133,615	33,682	55,716	533	974,834	878,190
2001	3,827	2,149	8,264	14,240	134,816	35,228	56,264	567	936,798	924,573
2002	3,703	2,262	7,822	13,787	137,721	37,192	55,569	592	827,741	927,523
2003	3,608	2,269	7,375	13,252	137,743	38,177	54,765	619	749,408	899,290
2004	3,444	2,293	6,916	12,653	134,144	38,950	53,815	648	873,520	913,948
2005	3,318	2,285	6,550	12,153	134,810	40,630	53,630	682	971,242	933,974
2006	3,140	2,321	5,963	11,424	131,437	41,859	51,646	722	1,014,414	951,540
2007	2,964	2,372	5,687	11,023	127,588	43,046	53,059	777	1,105,890	1,004,452
2008	2,821	2,425	5,718	10,964	128,030	45,385	57,596	839	1,142,078	1,102,107
2009	2,701	2,476	5,408	10,585	128,970	47,749	58,318	899	878,169	1,097,711

**Historical Summary of Statistical Data  
Public Employees Retirement System  
(Noncontributory)**

Plan Year Beginning January 1st	Participant Counts				Covered Payroll (\$ Thousands)	Average Pay (7)	Retirement Benefits in Force Annual Amount (\$ Thousands)	Average Retiree Monthly Benefit (9)	Market Value of Assets (\$ Thousands)	Actuarial Value of Assets (\$ Thousands)
	Active (2)	Inactive (3)	Retired (4)	Total (5)						
1990	43,981	9,783	4,421	58,185	940,325	21,380	56,500	1,064	Not Available	2,100,892
1991	50,245	15,373	5,206	70,824	1,061,835	21,133	68,032	1,089	2,618,017	2,594,245
1992	58,836	8,042	6,114	72,992	1,329,925	22,604	76,871	1,048	3,345,871	3,041,640
1993	59,739	7,911	7,023	74,673	1,425,612	23,864	89,557	1,063	3,609,761	3,480,582
1994	63,448	9,507	8,025	80,980	1,536,528	24,217	104,731	1,088	4,258,021	4,039,120
1995	67,698	10,131	9,143	86,972	1,688,967	24,949	121,850	1,111	4,312,948	4,372,190
1996	69,922	12,413	10,458	92,793	1,862,940	26,643	142,838	1,138	5,497,373	5,128,203
1997	73,478	13,965	11,841	99,284	2,048,876	27,884	166,432	1,171	6,547,598	5,954,796
1998	76,728	15,383	13,242	105,353	2,231,957	29,089	192,723	1,213	7,711,808	6,896,740
1999	77,360	17,494	14,645	109,499	2,343,986	30,300	220,230	1,253	8,560,909	7,894,249
2000	80,639	18,630	16,163	115,432	2,486,200	30,831	248,366	1,281	10,112,606	9,186,463
2001	81,850	20,357	17,728	119,935	2,611,413	31,905	280,910	1,320	10,367,596	10,294,444
2002	83,690	27,385	19,145	130,220	2,801,564	33,475	314,821	1,370	9,848,682	11,021,828
2003	83,925	26,664	20,623	131,212	2,888,853	34,422	351,690	1,421	8,963,388	10,756,065
2004	84,039	28,673	22,202	134,914	2,915,008	34,686	388,305	1,457	11,191,566	11,551,092
2005	85,502	30,498	23,782	139,782	3,058,487	35,771	426,813	1,496	12,639,732	12,093,408
2006	86,502	33,035	25,446	144,983	3,121,800	36,089	466,287	1,527	13,756,039	12,935,862
2007	87,960	34,820	27,866	150,646	3,284,295	37,339	532,188	1,592	15,664,709	14,295,945
2008	91,342	36,713	30,325	158,380	3,583,525	39,232	596,337	1,639	16,564,574	16,026,629
2009	93,633	38,324	32,104	164,061	3,837,934	40,989	642,434	1,668	12,533,979	15,667,473

**Historical Summary of Statistical Data  
Public Safety Retirement System  
(Contributory)**

Plan Year Beginning January 1st	Participant Counts				Covered Payroll (\$ Thousands)	Average Pay (7)	Retirement Benefits in Force Annual Amount (\$ Thousands)	Average Retiree Monthly Benefit (9)	Market Value of Assets (\$ Thousands)	Actuarial Value of Assets (\$ Thousands)
	Active (2)	Inactive (3)	Retired (4)	Total (5)						
1990	2,612	713	1,194	4,519	65,978	25,260	13,139	917	Not Available	330,407
1991	1,641	520	1,190	3,351	42,496	25,896	13,530	948	240,788	241,347
1992	1,644	709	1,237	3,590	44,469	27,049	14,290	963	289,472	263,237
1993	1,591	705	1,251	3,547	44,934	28,244	14,860	990	295,915	285,043
1994	1,601	714	1,273	3,588	46,728	29,187	15,373	1,006	326,536	311,148
1995	1,280	568	1,294	3,142	38,571	30,134	16,087	1,036	284,198	289,572
1996	971	525	1,321	2,817	30,304	31,209	17,323	1,093	310,209	291,478
1997	952	543	1,322	2,817	31,940	33,550	17,735	1,118	335,065	304,699
1998	1,006	531	1,340	2,877	34,262	34,058	18,487	1,150	364,531	324,488
1999	855	498	1,344	2,697	29,704	34,742	19,147	1,187	347,477	316,739
2000	804	486	1,333	2,623	28,957	36,016	19,351	1,210	363,654	327,635
2001	794	479	1,243	2,516	30,021	37,810	18,611	1,248	331,370	326,949
2002	795	503	1,257	2,555	30,783	38,721	19,480	1,291	293,617	328,959
2003	789	502	1,250	2,541	31,501	39,925	20,222	1,348	269,041	322,275
2004	759	519	1,249	2,527	31,688	41,749	20,759	1,385	316,514	331,432
2005	740	522	1,241	2,503	32,446	43,846	21,202	1,424	352,753	339,304
2006	698	526	1,256	2,480	31,443	45,047	22,127	1,468	368,717	345,699
2007	693	534	1,252	2,479	32,291	46,596	23,020	1,532	398,502	361,788
2008	539	505	1,101	2,145	25,700	47,681	20,452	1,548	330,176	318,303
2009	188	431	1,027	1,646	9,507	50,569	19,531	1,585	201,270	267,761

**Historical Summary of Statistical Data  
Public Safety Retirement System  
(Noncontributory)**

Plan Year Beginning January 1st	Participant Counts				Covered Payroll (\$ Thousands)	Average Pay (7)	Retirement Benefits in Force Annual Amount (\$ Thousands)	Average Retiree Monthly Benefit (9)	Market Value of Assets (\$ Thousands)	Actuarial Value of Assets (\$ Thousands)
	Active (2)	Inactive (3)	Retired (4)	Total (5)						
1990	1,512	32	15	1,559	37,798	24,999	229	917	Not Available	330,407
1991	2,697	154	65	2,916	68,205	25,290	997	1,278	136,287	132,275
1992	3,006	174	120	3,300	76,914	25,587	1,939	1,346	179,950	162,737
1993	3,198	185	175	3,558	85,678	26,791	2,935	1,398	200,668	193,301
1994	3,289	198	238	3,725	89,839	27,315	4,272	1,496	251,536	236,786
1995	3,899	360	304	4,563	111,292	28,544	5,684	1,558	297,278	300,101
1996	4,455	555	395	5,405	130,552	29,305	7,596	1,603	409,217	379,132
1997	4,720	614	492	5,826	149,086	31,586	9,870	1,672	496,197	450,407
1998	5,033	664	592	6,289	161,826	32,153	12,068	1,699	606,326	542,680
1999	5,427	752	747	6,926	180,904	33,334	15,603	1,741	726,304	672,062
2000	5,735	865	882	7,482	196,271	34,223	18,504	1,748	898,266	818,697
2001	5,974	832	1,118	7,924	212,442	35,561	23,428	1,746	964,708	960,047
2002	6,120	1,464	1,326	8,910	225,760	36,889	28,907	1,817	936,286	1,047,507
2003	6,228	1,733	1,462	9,423	237,192	38,085	33,444	1,906	855,508	1,027,160
2004	6,324	1,915	1,617	9,856	243,745	38,543	38,614	1,990	1,087,654	1,117,457
2005	6,428	2,093	1,808	10,329	257,241	40,019	44,508	2,051	1,241,290	1,185,601
2006	6,556	2,283	2,038	10,877	263,905	40,254	51,112	2,090	1,367,735	1,287,322
2007	6,740	2,481	2,205	11,426	282,955	41,981	57,294	2,165	1,582,989	1,447,411
2008	7,015	2,633	2,612	12,260	311,886	44,460	67,997	2,169	1,776,121	1,720,309
2009	7,642	2,854	2,841	13,337	356,186	46,609	75,602	2,218	1,409,649	1,745,887

**Historical Summary of Statistical Data  
Firefighters Retirement System**

Plan Year Beginning January 1st	Participant Counts				Covered Payroll (\$ Thousands)	Average Pay (7)	Retirement Benefits in Force Annual Amount (\$ Thousands)	Average Retiree Monthly Benefit (9)	Market Value of Assets (\$ Thousands)	Actuarial Value of Assets (\$ Thousands)
	Active (2)	Inactive (3)	Retired (4)	Total (5)						
1990	993	76	544	1,613	28,661	28,863	6,626	1,015	Not Available	149,672
1991	1,024	66	553	1,643	30,649	29,932	7,134	1,075	163,428	161,945
1992	1,047	82	575	1,704	33,232	31,740	7,672	1,112	202,726	183,352
1993	1,072	89	587	1,748	36,500	34,049	8,209	1,165	211,975	203,985
1994	1,079	100	595	1,774	37,191	34,468	8,678	1,215	247,715	234,501
1995	1,123	103	618	1,844	39,669	35,324	9,811	1,323	249,712	253,304
1996	1,165	116	644	1,925	42,599	36,566	10,397	1,415	315,063	293,816
1997	1,229	123	675	2,027	47,550	38,690	12,049	1,488	362,555	329,475
1998	1,285	130	707	2,122	50,886	39,600	13,747	1,620	421,184	376,178
1999	1,352	156	736	2,244	54,402	40,238	14,940	1,692	460,190	423,405
2000	1,380	160	772	2,312	57,664	41,786	16,112	1,739	532,783	483,373
2001	1,433	173	823	2,429	61,593	42,982	18,163	1,839	540,822	536,503
2002	1,504	179	866	2,549	66,871	44,462	20,008	1,925	508,565	569,151
2003	1,545	197	884	2,626	71,347	46,179	22,246	2,097	461,324	553,589
2004	1,577	222	920	2,719	75,148	47,653	22,859	2,071	570,160	589,502
2005	1,608	237	948	2,793	79,168	49,234	24,242	2,131	637,979	610,688
2006	1,647	294	979	2,920	83,495	50,695	26,064	2,219	686,062	644,496
2007	1,690	315	1,021	3,026	87,089	51,532	28,312	2,311	773,774	705,051
2008	1,786	338	1,098	3,222	94,488	52,905	31,944	2,424	814,674	787,663
2009	1,852	370	1,120	3,342	101,508	54,810	33,985	2,529	612,696	765,871



**Historical Summary of Statistical Data  
Judges Retirement System**

Plan Year Beginning January 1st	Participant Counts				Covered Payroll (\$ Thousands)	Average Pay (7)	Retirement Benefits in Force Annual Amount (\$ Thousands)	Average Retiree Monthly Benefit (9)	Market Value of Assets (\$ Thousands)	Actuarial Value of Assets (\$ Thousands)
	Active	Inactive	Retired	Total						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1990	90	0	50	140	5,283	58,700	826	1,015	Not Available	19,127
1991	87	0	46	133	5,867	67,438	827	1,499	22,432	22,242
1992	89	0	53	142	6,267	70,416	1,087	1,710	28,765	26,167
1993	80	1	62	143	6,434	80,424	1,597	2,147	31,388	30,254
1994	85	1	68	154	6,897	81,142	1,930	2,365	37,398	35,479
1995	87	0	70	157	7,263	83,488	2,193	2,610	38,220	38,726
1996	98	3	70	171	8,480	86,534	2,309	2,749	47,531	44,304
1997	100	1	69	170	9,202	92,019	2,396	2,894	55,757	50,721
1998	102	1	72	175	9,298	91,158	2,778	3,215	66,299	59,373
1999	103	2	73	178	9,667	93,850	2,970	3,391	73,650	67,998
2000	106	2	73	181	10,150	95,750	3,078	3,514	85,921	78,130
2001	104	4	75	183	10,318	99,208	3,299	3,666	87,731	87,139
2002	106	4	78	188	10,910	102,925	3,608	3,855	82,760	92,649
2003	106	4	77	187	11,095	104,674	3,728	4,035	75,753	90,904
2004	106	5	83	194	11,163	105,311	4,306	4,324	94,467	97,412
2005	108	6	84	198	11,820	109,442	4,431	4,396	105,483	100,814
2006	109	5	85	199	11,721	107,533	4,711	4,618	113,353	106,374
2007	110	5	87	202	12,336	112,143	5,145	4,928	128,300	116,879
2008	110	6	96	212	13,387	121,700	5,931	5,149	134,366	129,847
2009	110	5	97	212	14,347	130,423	6,190	5,318	100,896	126,120

**Historical Summary of Statistical Data  
Legislative and Governors Retirement System**

Plan Year Beginning January 1st	Participant Counts				Covered Payroll (\$ Thousands)	Average Pay	Retirement Benefits in Force Annual Amount (\$ Thousands)	Average Retiree Monthly Benefit	Market Value of Assets (\$ Thousands)	Actuarial Value of Assets (\$ Thousands)
	Active	Inactive	Retired	Total						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1990	76	133	162	371	288	3,789	329	169	Not Available	6,007
1991	57	118	150	325	238	4,172	295	164	6,427	6,355
1992	87	127	173	387	254	2,925	369	178	7,584	6,790
1993	84	120	180	384	246	2,925	396	183	7,443	7,122
1994	93	126	188	407	427	4,593	385	171	8,089	7,683
1995	89	112	196	397	412	4,628	422	180	7,684	7,804
1996	96	111	201	408	439	4,569	445	184	8,788	8,185
1997	75	115	200	390	367	4,892	457	190	9,561	8,636
1998	90	108	208	406	488	5,419	476	191	10,531	9,318
1999	91	99	211	401	495	5,440	504	199	10,976	9,988
2000	94	101	221	416	511	5,437	531	200	12,159	10,946
2001	86	96	218	400	478	5,557	536	205	11,724	11,569
2002	94	107	228	429	601	6,391	562	206	10,448	11,710
2003	94	105	231	430	592	6,297	585	211	8,932	10,719
2004	100	110	223	433	610	6,097	573	214	10,390	10,906
2005	97	103	221	421	521	5,374	577	218	11,066	10,650
2006	88	113	224	425	788	8,955	608	226	11,319	10,587
2007	89	110	216	415	797	8,955	604	233	12,163	10,983
2008	92	118	220	430	538	5,850	596	226	12,195	11,736
2009	91	111	222	424	532	5,850	580	218	8,673	10,841

---

## **APPENDIX I**

---

**STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS**

1. *Investment return rate:*

7.75% per annum, compounded annually, composed of a 3.00% inflation rate and a 4.75% real rate of return, net of administrative and investment expenses.

2. *Active member mortality rates:*

Active member mortality rates are a function of the member’s sex, occupation, and age. These rates were developed based on plan experience. For the Public Safety and Firefighters Systems, 25% of deaths are assumed to be service related. Rates at selected ages are shown:

Active Male Members			
Age	Local Government and Public Employees	Public Educators	Public Safety and Firefighters <sup>1</sup>
20	.000495	.000130	.000440
25	.000385	.000130	.000440
30	.000440	.000195	.000440
35	.000660	.000195	.000440
40	.000825	.000390	.000605
45	.001045	.000650	.001045
50	.001540	.001300	.001760
55	.002585	.002340	.002750
60	.004180	.003705	.003740
65	.006380	.004680	.004730
70	.009130	.005200	.005665

Active Female Members		
Age	Local Government and Public Employees	Public Educators
20	.000275	.000490
25	.000275	.000210
30	.000275	.000070
35	.000330	.000210
40	.000440	.000420
45	.000660	.000840
50	.001045	.001260
55	.001540	.001750
60	.002200	.002380
65	.003025	.003290
70	.004015	.004550

<sup>1</sup> Males and female combined.

3. *Disability rates:*

Disability rates are a function of the member’s sex, occupation, and age. These rates were developed based on plan experience. Rates are applied at all ages. For the Public Safety and Firefighters Systems, 25% of disabilities are assumed to be service related. Rates at selected ages are shown:

Active Male Members					
Age	Local Government	Public Employees	Public Educators	Public Safety <sup>1</sup>	Firefighters <sup>1</sup>
20	.000220	.000240	.000120	.000400	.000450
25	.000330	.000360	.000180	.000600	.000675
30	.000660	.000720	.000360	.001200	.001350
35	.000990	.001080	.000540	.001800	.002025
40	.001320	.001440	.000720	.002400	.002700
45	.002200	.002400	.001200	.004000	.004500
50	.002860	.003120	.001560	.005200	.005850
55	.004510	.004920	.002460	.008200	.009225
60	.006160	.006720	.003360	.011200	.012600

Active Female Members			
Age	Local Government	Public Employees	Public Educators
20	.000220	.000240	.000120
25	.000330	.000360	.000180
30	.000660	.000720	.000360
35	.000990	.001080	.000540
40	.001320	.001440	.000720
45	.002200	.002400	.001200
50	.002860	.003120	.001560
55	.004510	.004920	.002460
60	.006160	.006720	.003360

<sup>1</sup> Males and female combined.

4. Termination rates (for causes other than death, disability or retirement):

Termination rates are a function of the member’s sex, occupation, age and service. These rates were developed based on plan experience. Termination rates are not applied after a member becomes eligible for a reduced or unreduced retirement benefit. Rates at selected ages are shown:

Active Male Members - Local Government						
Years of Service						
Age	0	1	2	3	4	5+
20	0.2262	0.2154	0.1750	0.1219	0.0688	0.1096
25	0.1884	0.1795	0.1470	0.1016	0.0562	0.0815
30	0.1588	0.1514	0.1250	0.0873	0.0498	0.0605
35	0.1373	0.1308	0.1092	0.0793	0.0494	0.0463
40	0.1235	0.1177	0.1004	0.0778	0.0550	0.0381
45	0.1184	0.1128	0.0993	0.0834	0.0675	0.0334
50	0.1228	0.1169	0.1069	0.0972	0.0877	0.0311
55	0.1383	0.1317	0.1243	0.1206	0.1168	0.0336
60	0.1452	0.1383	0.1306	0.1266	0.1227	0.0352
65	0.1525	0.1452	0.1371	0.1329	0.1288	0.0370
70	0.1670	0.1590	0.1500	0.1455	0.1410	0.0405

Active Female Members - Local Government						
Years of Service						
Age	0	1	2	3	4	5+
20	0.2924	0.2525	0.2220	0.2004	0.1903	0.1881
25	0.2766	0.2262	0.1899	0.1672	0.1586	0.1316
30	0.2572	0.2006	0.1613	0.1386	0.1317	0.0895
35	0.2352	0.1764	0.1365	0.1147	0.1094	0.0618
40	0.2125	0.1547	0.1164	0.0963	0.0925	0.0473
45	0.1922	0.1381	0.1027	0.0844	0.0814	0.0422
50	0.1799	0.1293	0.0966	0.0795	0.0768	0.0421
55	0.1825	0.1319	0.0986	0.0816	0.0795	0.0432
60	0.2066	0.1488	0.1093	0.0905	0.0898	0.0443
65	0.2558	0.1816	0.1286	0.1060	0.1080	0.0453
70	0.3311	0.2309	0.1564	0.1278	0.1338	0.0461

4. Termination rates (continued):

Active Male Members - Public Employees						
Years of Service						
Age	0	1	2	3	4	5+
20	0.4502	0.3451	0.2749	0.2342	0.2043	0.1639
25	0.3536	0.2884	0.2342	0.1906	0.1520	0.1185
30	0.2903	0.2412	0.1949	0.1531	0.1154	0.0832
35	0.2525	0.2017	0.1573	0.1210	0.0937	0.0578
40	0.2279	0.1673	0.1224	0.0944	0.0832	0.0410
45	0.2067	0.1376	0.0934	0.0743	0.0791	0.0304
50	0.1841	0.1154	0.0752	0.0630	0.0776	0.0243
55	0.1590	0.1038	0.0724	0.0637	0.0772	0.0242
60	0.1322	0.1060	0.0888	0.0794	0.0778	0.0324
65	0.1388	0.1112	0.0933	0.0833	0.0817	0.0340
70	0.1440	0.1154	0.0968	0.0865	0.0848	0.0354

Active Female Members - Public Employees						
Years of Service						
Age	0	1	2	3	4	5+
20	0.3305	0.3401	0.3253	0.2909	0.2521	0.2804
25	0.3044	0.2875	0.2594	0.2262	0.1946	0.1870
30	0.2740	0.2367	0.2012	0.1706	0.1464	0.1187
35	0.2411	0.1909	0.1527	0.1265	0.1087	0.0756
40	0.2088	0.1552	0.1186	0.0963	0.0836	0.0526
45	0.1808	0.1324	0.1004	0.0815	0.0719	0.0405
50	0.1610	0.1218	0.0956	0.0799	0.0733	0.0343
55	0.1524	0.1218	0.1008	0.0890	0.0870	0.0334
60	0.1579	0.1316	0.1136	0.1065	0.1121	0.0375
65	0.1788	0.1514	0.1332	0.1313	0.1492	0.0465
70	0.2153	0.1815	0.1595	0.1634	0.1975	0.0602

4. Termination rates (continued):

Active Male Members - Public Educators						
Years of Service						
Age	0	1	2	3	4	5+
20	0.1649	0.1585	0.1471	0.0930	0.0390	0.0889
25	0.1498	0.1361	0.1220	0.0871	0.0523	0.0629
30	0.1268	0.1175	0.1025	0.0823	0.0622	0.0430
35	0.1195	0.1027	0.0885	0.0785	0.0685	0.0290
40	0.1130	0.0926	0.0795	0.0756	0.0719	0.0208
45	0.1152	0.0895	0.0744	0.0733	0.0721	0.0162
50	0.1343	0.0958	0.0726	0.0711	0.0696	0.0125
55	0.1764	0.1131	0.0728	0.0685	0.0643	0.0093
60	0.1853	0.1188	0.0765	0.0720	0.0675	0.0098
65	0.1946	0.1248	0.0802	0.0756	0.0709	0.0103
70	0.2131	0.1366	0.0880	0.0828	0.0776	0.0113

Active Female Members - Public Educators						
Years of Service						
Age	0	1	2	3	4	5+
20	0.2727	0.2674	0.2532	0.2392	0.1783	0.1920
25	0.2257	0.1962	0.1877	0.1791	0.1449	0.1304
30	0.1587	0.1442	0.1368	0.1292	0.1140	0.0838
35	0.1228	0.1093	0.0970	0.0895	0.0856	0.0521
40	0.1187	0.0885	0.0693	0.0616	0.0622	0.0347
45	0.1135	0.0786	0.0570	0.0468	0.0467	0.0274
50	0.1024	0.0765	0.0590	0.0470	0.0406	0.0245
55	0.0834	0.0804	0.0740	0.0617	0.0447	0.0243
60	0.0877	0.0845	0.0777	0.0648	0.0470	0.0255
65	0.0920	0.0886	0.0816	0.0679	0.0492	0.0268
70	0.0964	0.0929	0.0856	0.0713	0.0517	0.0281



4. Termination rates (continued):

Active Male and Female Members - Public Safety						
Years of Service						
Age	0	1	2	3	4	5+
20	0.1277	0.1062	0.0781	0.0752	0.0710	0.0977
25	0.1076	0.0868	0.0633	0.0624	0.0590	0.0693
30	0.1026	0.0769	0.0527	0.0509	0.0481	0.0469
35	0.1128	0.0766	0.0461	0.0409	0.0386	0.0308
40	0.1370	0.0851	0.0432	0.0323	0.0305	0.0205
45	0.1735	0.1008	0.0431	0.0256	0.0242	0.0152
50	0.2206	0.1220	0.0455	0.0213	0.0202	0.0130
55	0.2764	0.1472	0.0497	0.0202	0.0190	0.0129
60	0.3399	0.1756	0.0557	0.0222	0.0210	0.0140
65	0.3740	0.2070	0.0635	0.0280	0.0265	0.0163
70	0.4114	0.2415	0.0732	0.0373	0.0352	0.0196

Years of Service	Active Male and Female Members - Firefighters
0	0.090
1	0.025
2	0.025
3	0.025
4	0.025
5	0.015
6	0.015
7	0.015
8	0.015
9	0.015
10	0.015
11	0.015
12	0.000
13	0.000
14	0.000
15+	0.000

5. *Refund rates:*

The percent of vested members electing to receive a refund of contributions on termination of employment. This rate is only applied to members of the contributory systems; vested members in the noncontributory systems are assumed to defer their benefits until retirement, even if they have a contribution account from service prior to the establishment of the noncontributory system. The rate is a function of the member's sex, occupation and service. These rates are based on plan experience.

Males				
Service	Local Government	Public Employees	Public Educators	Public Safety & Firefighters <sup>1</sup>
0-3	100%	100%	100%	100%
4	75%	86%	75%	76%
5	73%	83%	73%	74%
6	70%	80%	70%	71%
7	67%	78%	66%	69%
8	65%	77%	61%	67%
9	62%	75%	57%	65%
10	61%	73%	54%	57%
11	59%	70%	50%	50%
12	58%	68%	47%	42%
13	55%	66%	42%	40%
14	52%	65%	38%	37%
15	49%	63%	33%	35%
16	48%	61%	28%	33%
17	46%	60%	22%	31%
18	45%	58%	17%	29%
19	23%	29%	09%	15%
20 or more	00%	00%	00%	00%

<sup>1</sup> Male and female members combined.

5. *Refund rates (continued):*

Females			
Service	Local Government	Public Employees	Public Educators
0-3	100%	100%	100%
4	77%	80%	65%
5	75%	79%	64%
6	72%	77%	62%
7	69%	74%	61%
8	67%	71%	59%
9	64%	68%	58%
10	61%	64%	53%
11	57%	60%	48%
12	54%	56%	43%
13	49%	55%	39%
14	45%	53%	36%
15	40%	52%	32%
16	35%	49%	27%
17	30%	46%	21%
18	25%	43%	16%
19	13%	22%	08%
20 or more	00%	00%	00%

6. *Retirement rates:*

Retirement rates are a function of the member’s age, service, sex and occupation. Rates are based on plan experience. Rates are applied only at ages at which the member is eligible for a reduced or unreduced retirement benefit. Members are assumed to retire no later than age 70 (age 65 for the public safety and firefighter systems). Sample rates are shown below. Retirement rates shown for local government, public employees and public educators below age 60 for 25-29 years of service apply only to noncontributory members.

Local Government - Males							
	Years of Service						
Age	0-3	4-9	10-14	15-19	20-24	25-29	30+
45	0.000	0.000	0.000	0.000	0.000	0.025	0.160
46	0.000	0.000	0.000	0.000	0.000	0.025	0.160
47	0.000	0.000	0.000	0.000	0.000	0.025	0.160
48	0.000	0.000	0.000	0.000	0.000	0.025	0.160
49	0.000	0.000	0.000	0.000	0.000	0.025	0.160
50	0.000	0.000	0.000	0.000	0.000	0.025	0.220
51	0.000	0.000	0.000	0.000	0.000	0.025	0.220
52	0.000	0.000	0.000	0.000	0.000	0.025	0.220
53	0.000	0.000	0.000	0.000	0.000	0.025	0.220
54	0.000	0.000	0.000	0.000	0.000	0.025	0.220
55	0.000	0.000	0.000	0.000	0.000	0.050	0.220
56	0.000	0.000	0.000	0.000	0.000	0.050	0.220
57	0.000	0.000	0.000	0.000	0.000	0.050	0.220
58	0.000	0.000	0.000	0.000	0.000	0.050	0.220
59	0.000	0.000	0.000	0.000	0.000	0.050	0.220
60	0.000	0.000	0.000	0.000	0.100	0.100	0.250
61	0.000	0.000	0.000	0.000	0.100	0.100	0.150
62	0.000	0.000	0.300	0.300	0.250	0.150	0.500
63	0.000	0.000	0.200	0.150	0.150	0.250	0.300
64	0.000	0.000	0.200	0.150	0.150	0.250	0.300
65	0.000	0.200	0.350	0.450	0.450	0.500	0.500
66	0.000	0.200	0.200	0.200	0.200	0.200	0.300
67	0.000	0.200	0.200	0.200	0.200	0.200	0.300
68	0.000	0.200	0.200	0.200	0.200	0.200	0.300
69	0.000	0.200	0.200	0.200	0.200	0.200	0.300
70	0.000	1.000	1.000	1.000	1.000	1.000	1.000

6. Retirement rates (continued):

Public Employees – Males							
Age	Years of Service						
	0-3	4-9	10-14	15-19	20-24	25-29	30+
45	0.000	0.000	0.000	0.000	0.000	0.020	0.140
46	0.000	0.000	0.000	0.000	0.000	0.020	0.140
47	0.000	0.000	0.000	0.000	0.000	0.020	0.140
48	0.000	0.000	0.000	0.000	0.000	0.020	0.140
49	0.000	0.000	0.000	0.000	0.000	0.020	0.140
50	0.000	0.000	0.000	0.000	0.000	0.030	0.160
51	0.000	0.000	0.000	0.000	0.000	0.030	0.160
52	0.000	0.000	0.000	0.000	0.000	0.030	0.160
53	0.000	0.000	0.000	0.000	0.000	0.030	0.160
54	0.000	0.000	0.000	0.000	0.000	0.030	0.160
55	0.000	0.000	0.000	0.000	0.000	0.030	0.180
56	0.000	0.000	0.000	0.000	0.000	0.030	0.180
57	0.000	0.000	0.000	0.000	0.000	0.030	0.180
58	0.000	0.000	0.000	0.000	0.000	0.030	0.180
59	0.000	0.000	0.000	0.000	0.000	0.030	0.180
60	0.000	0.000	0.000	0.000	0.050	0.100	0.230
61	0.000	0.000	0.000	0.000	0.050	0.100	0.230
62	0.000	0.000	0.150	0.200	0.200	0.250	0.400
63	0.000	0.000	0.100	0.150	0.150	0.200	0.350
64	0.000	0.000	0.050	0.100	0.100	0.150	0.300
65	0.000	0.400	0.400	0.400	0.400	0.500	0.500
66	0.000	0.200	0.200	0.200	0.200	0.200	0.350
67	0.000	0.200	0.200	0.200	0.200	0.200	0.200
68	0.000	0.200	0.200	0.200	0.200	0.200	0.200
69	0.000	0.200	0.200	0.200	0.200	0.200	0.200
70	0.000	1.000	1.000	1.000	1.000	1.000	1.000

6. Retirement rates (continued):

Public Educators – Males							
	Years of Service						
Age	0-3	4-9	10-14	15-19	20-24	25-29	30+
45	0.000	0.000	0.000	0.000	0.000	0.010	0.250
46	0.000	0.000	0.000	0.000	0.000	0.010	0.250
47	0.000	0.000	0.000	0.000	0.000	0.010	0.250
48	0.000	0.000	0.000	0.000	0.000	0.010	0.250
49	0.000	0.000	0.000	0.000	0.000	0.010	0.250
50	0.000	0.000	0.000	0.000	0.000	0.010	0.250
51	0.000	0.000	0.000	0.000	0.000	0.010	0.250
52	0.000	0.000	0.000	0.000	0.000	0.010	0.250
53	0.000	0.000	0.000	0.000	0.000	0.010	0.250
54	0.000	0.000	0.000	0.000	0.000	0.010	0.250
55	0.000	0.000	0.000	0.000	0.000	0.020	0.250
56	0.000	0.000	0.000	0.000	0.000	0.020	0.250
57	0.000	0.000	0.000	0.000	0.000	0.020	0.250
58	0.000	0.000	0.000	0.000	0.000	0.020	0.250
59	0.000	0.000	0.000	0.000	0.000	0.020	0.250
60	0.000	0.000	0.000	0.000	0.050	0.050	0.350
61	0.000	0.000	0.000	0.000	0.100	0.100	0.350
62	0.000	0.000	0.150	0.150	0.250	0.250	0.650
63	0.000	0.000	0.100	0.100	0.150	0.150	0.350
64	0.000	0.000	0.050	0.050	0.150	0.150	0.350
65	0.000	0.250	0.250	0.300	0.400	0.500	0.700
66	0.000	0.200	0.200	0.250	0.250	0.250	0.300
67	0.000	0.200	0.200	0.250	0.250	0.250	0.300
68	0.000	0.200	0.200	0.250	0.250	0.250	0.300
69	0.000	0.200	0.200	0.250	0.250	0.250	0.300
70	0.000	1.000	1.000	1.000	1.000	1.000	1.000

6. Retirement rates (continued):

Local Government – Females							
	Years of Service						
Age	0-3	4-9	10-14	15-19	20-24	25-29	30+
45	0.000	0.000	0.000	0.000	0.000	0.040	0.300
46	0.000	0.000	0.000	0.000	0.000	0.040	0.300
47	0.000	0.000	0.000	0.000	0.000	0.040	0.300
48	0.000	0.000	0.000	0.000	0.000	0.040	0.300
49	0.000	0.000	0.000	0.000	0.000	0.040	0.300
50	0.000	0.000	0.000	0.000	0.000	0.040	0.300
51	0.000	0.000	0.000	0.000	0.000	0.040	0.300
52	0.000	0.000	0.000	0.000	0.000	0.040	0.300
53	0.000	0.000	0.000	0.000	0.000	0.040	0.300
54	0.000	0.000	0.000	0.000	0.000	0.040	0.300
55	0.000	0.000	0.000	0.000	0.000	0.040	0.350
56	0.000	0.000	0.000	0.000	0.000	0.040	0.350
57	0.000	0.000	0.000	0.000	0.000	0.040	0.350
58	0.000	0.000	0.000	0.000	0.000	0.040	0.350
59	0.000	0.000	0.000	0.000	0.000	0.040	0.350
60	0.000	0.000	0.000	0.000	0.130	0.130	0.400
61	0.000	0.000	0.000	0.000	0.130	0.130	0.250
62	0.000	0.000	0.200	0.250	0.250	0.250	0.450
63	0.000	0.000	0.150	0.200	0.200	0.200	0.300
64	0.000	0.000	0.200	0.250	0.250	0.250	0.300
65	0.000	0.350	0.350	0.350	0.350	0.400	0.500
66	0.000	0.200	0.200	0.200	0.200	0.200	0.300
67	0.000	0.200	0.200	0.200	0.200	0.200	0.300
68	0.000	0.200	0.200	0.200	0.200	0.200	0.300
69	0.000	0.200	0.200	0.200	0.200	0.200	0.300
70	0.000	1.000	1.000	1.000	1.000	1.000	1.000

6. Retirement rates (continued):

Public Employees – Females							
Age	Years of Service						
	0-3	4-9	10-14	15-19	20-24	25-29	30+
45	0.000	0.000	0.000	0.000	0.000	0.020	0.200
46	0.000	0.000	0.000	0.000	0.000	0.020	0.200
47	0.000	0.000	0.000	0.000	0.000	0.020	0.200
48	0.000	0.000	0.000	0.000	0.000	0.020	0.200
49	0.000	0.000	0.000	0.000	0.000	0.020	0.200
50	0.000	0.000	0.000	0.000	0.000	0.030	0.200
51	0.000	0.000	0.000	0.000	0.000	0.030	0.200
52	0.000	0.000	0.000	0.000	0.000	0.030	0.200
53	0.000	0.000	0.000	0.000	0.000	0.030	0.200
54	0.000	0.000	0.000	0.000	0.000	0.030	0.200
55	0.000	0.000	0.000	0.000	0.000	0.040	0.200
56	0.000	0.000	0.000	0.000	0.000	0.040	0.200
57	0.000	0.000	0.000	0.000	0.000	0.040	0.200
58	0.000	0.000	0.000	0.000	0.000	0.040	0.200
59	0.000	0.000	0.000	0.000	0.000	0.040	0.200
60	0.000	0.000	0.000	0.000	0.150	0.150	0.400
61	0.000	0.000	0.000	0.000	0.100	0.150	0.300
62	0.000	0.000	0.200	0.200	0.300	0.300	0.600
63	0.000	0.000	0.150	0.150	0.250	0.250	0.400
64	0.000	0.000	0.200	0.200	0.200	0.150	0.300
65	0.000	0.450	0.450	0.450	0.450	0.450	0.450
66	0.000	0.250	0.250	0.250	0.250	0.250	0.250
67	0.000	0.250	0.250	0.250	0.250	0.250	0.250
68	0.000	0.250	0.250	0.250	0.250	0.250	0.250
69	0.000	0.250	0.250	0.250	0.250	0.250	0.250
70	0.000	1.000	1.000	1.000	1.000	1.000	1.000



6. Retirement rates (continued):

Public Educators – Females							
	Years of Service						
Age	0-3	4-9	10-14	15-19	20-24	25-29	30+
45	0.000	0.000	0.000	0.000	0.000	0.010	0.160
46	0.000	0.000	0.000	0.000	0.000	0.010	0.160
47	0.000	0.000	0.000	0.000	0.000	0.010	0.160
48	0.000	0.000	0.000	0.000	0.000	0.010	0.160
49	0.000	0.000	0.000	0.000	0.000	0.010	0.160
50	0.000	0.000	0.000	0.000	0.000	0.010	0.200
51	0.000	0.000	0.000	0.000	0.000	0.010	0.200
52	0.000	0.000	0.000	0.000	0.000	0.010	0.200
53	0.000	0.000	0.000	0.000	0.000	0.010	0.200
54	0.000	0.000	0.000	0.000	0.000	0.010	0.200
55	0.000	0.000	0.000	0.000	0.000	0.030	0.300
56	0.000	0.000	0.000	0.000	0.000	0.030	0.300
57	0.000	0.000	0.000	0.000	0.000	0.030	0.300
58	0.000	0.000	0.000	0.000	0.000	0.030	0.300
59	0.000	0.000	0.000	0.000	0.000	0.030	0.300
60	0.000	0.000	0.000	0.000	0.150	0.150	0.500
61	0.000	0.000	0.000	0.000	0.150	0.150	0.500
62	0.000	0.000	0.200	0.200	0.200	0.250	0.700
63	0.000	0.000	0.150	0.150	0.150	0.150	0.500
64	0.000	0.000	0.150	0.150	0.150	0.150	0.500
65	0.000	0.450	0.450	0.450	0.450	0.500	0.600
66	0.000	0.300	0.300	0.350	0.350	0.350	0.350
67	0.000	0.300	0.300	0.350	0.350	0.350	0.350
68	0.000	0.300	0.300	0.350	0.350	0.350	0.350
69	0.000	0.300	0.300	0.350	0.350	0.350	0.350
70	0.000	1.000	1.000	1.000	1.000	1.000	1.000

6. Retirement rates (continued):

Public Safety - Males and Females							
	Years of Service						
Age	0-3	4-9	10-14	15-19	20-24	25-29	30+
45	0.00	0.00	0.00	0.00	0.15	0.15	0.30
46	0.00	0.00	0.00	0.00	0.15	0.15	0.30
47	0.00	0.00	0.00	0.00	0.15	0.15	0.30
48	0.00	0.00	0.00	0.00	0.15	0.15	0.30
49	0.00	0.00	0.00	0.00	0.15	0.15	0.30
50	0.00	0.00	0.00	0.00	0.16	0.16	0.33
51	0.00	0.00	0.00	0.00	0.16	0.16	0.33
52	0.00	0.00	0.00	0.00	0.16	0.16	0.33
53	0.00	0.00	0.00	0.00	0.16	0.16	0.33
54	0.00	0.00	0.00	0.00	0.16	0.16	0.33
55	0.00	0.00	0.00	0.00	0.18	0.20	0.35
56	0.00	0.00	0.00	0.00	0.18	0.20	0.35
57	0.00	0.00	0.00	0.00	0.18	0.20	0.35
58	0.00	0.00	0.00	0.00	0.18	0.20	0.35
59	0.00	0.00	0.00	0.00	0.18	0.20	0.35
60	0.00	0.00	0.12	0.12	0.30	0.30	0.38
61	0.00	0.00	0.12	0.12	0.30	0.30	0.38
62	0.00	0.00	0.12	0.12	0.30	0.30	0.38
63	0.00	0.00	0.12	0.12	0.30	0.30	0.38
64	0.00	0.00	0.12	0.12	0.30	0.30	0.38
65	0.00	1.00	1.00	1.00	1.00	1.00	1.00

6. Retirement rates (continued):

Firefighters - Males and Females							
	Years of Service						
Age	0-3	4-9	10-14	15-19	20-24	25-29	30+
45	0.00	0.00	0.00	0.00	0.10	0.10	0.14
46	0.00	0.00	0.00	0.00	0.10	0.10	0.14
47	0.00	0.00	0.00	0.00	0.10	0.10	0.14
48	0.00	0.00	0.00	0.00	0.10	0.10	0.14
49	0.00	0.00	0.00	0.00	0.10	0.10	0.14
50	0.00	0.00	0.00	0.00	0.12	0.12	0.16
51	0.00	0.00	0.00	0.00	0.12	0.12	0.16
52	0.00	0.00	0.00	0.00	0.12	0.12	0.16
53	0.00	0.00	0.00	0.00	0.12	0.12	0.16
54	0.00	0.00	0.00	0.00	0.12	0.12	0.16
55	0.00	0.00	0.00	0.00	0.14	0.14	0.18
56	0.00	0.00	0.00	0.00	0.14	0.14	0.18
57	0.00	0.00	0.00	0.00	0.14	0.14	0.18
58	0.00	0.00	0.00	0.00	0.14	0.14	0.18
59	0.00	0.00	0.00	0.00	0.14	0.14	0.18
60	0.00	0.00	0.12	0.16	0.24	0.24	0.24
61	0.00	0.00	0.12	0.16	0.24	0.24	0.24
62	0.00	0.00	0.12	0.16	0.24	0.24	0.24
63	0.00	0.00	0.12	0.16	0.24	0.24	0.24
64	0.00	0.00	0.12	0.16	0.24	0.24	0.24
65	0.00	1.00	1.00	1.00	1.00	1.00	1.00

6. Retirement rates (continued):

Judges - Males and Females							
	Years of Service						
Age	0-3	4-9	10-14	15-19	20-24	25-29	30+
45	0.00	0.00	0.00	0.00	0.00	0.12	0.25
46	0.00	0.00	0.00	0.00	0.00	0.12	0.25
47	0.00	0.00	0.00	0.00	0.00	0.12	0.25
48	0.00	0.00	0.00	0.00	0.00	0.12	0.25
49	0.00	0.00	0.00	0.00	0.00	0.12	0.25
50	0.00	0.00	0.00	0.00	0.00	0.12	0.25
51	0.00	0.00	0.00	0.00	0.00	0.12	0.25
52	0.00	0.00	0.00	0.00	0.00	0.12	0.25
53	0.00	0.00	0.00	0.00	0.00	0.12	0.25
54	0.00	0.00	0.00	0.00	0.00	0.12	0.25
55	0.00	0.00	0.00	0.00	0.00	0.12	0.25
56	0.00	0.00	0.00	0.00	0.00	0.12	0.25
57	0.00	0.00	0.00	0.00	0.00	0.12	0.25
58	0.00	0.00	0.00	0.00	0.00	0.12	0.25
59	0.00	0.00	0.00	0.00	0.00	0.12	0.25
60	0.00	0.00	0.00	0.00	0.00	0.12	0.25
61	0.00	0.00	0.00	0.00	0.00	0.12	0.25
62	0.00	0.00	0.15	0.15	0.15	0.15	0.25
63	0.00	0.00	0.15	0.15	0.15	0.15	0.25
64	0.00	0.00	0.15	0.15	0.15	0.15	0.25
65	0.00	0.00	0.15	0.15	0.15	0.15	0.25
66	0.00	0.00	0.15	0.15	0.15	0.15	0.25
67	0.00	0.00	0.15	0.15	0.15	0.15	0.25
68	0.00	0.00	0.15	0.15	0.15	0.15	0.25
69	0.00	0.00	0.15	0.15	0.15	0.15	0.25
70	0.00	1.00	1.00	1.00	1.00	1.00	1.00

7. *Salary increase rates:*

Salaries for individual members are assumed to increase each year, as a function of the member’s occupation and service. Rates are composed of a 3.00% inflation rate, a 1.00% general increase rate that applies to all, and a variable promotional/longevity component that is a function of the member’s service.

Active Male and Female Members - Local Government		
Years of Service	Annual Promotional/Longevity Rates of Increase	Total Annual Rate of Increase Including 3.00% Inflation Component and 1.00% General Increase Rate
0	6.75%	10.75%
1	5.00	9.00
2	4.25	8.25
3	3.50	7.50
4	3.00	7.00
5	2.75	6.75
6	2.50	6.50
7	2.25	6.25
8	2.00	6.00
9	1.75	5.75
10	1.50	5.50
11	1.50	5.50
12	1.25	5.25
13	1.25	5.25
14	1.00	5.00
15	1.00	5.00
16	0.75	4.75
17	0.75	4.75
18	0.75	4.75
19	0.75	4.75
20	0.50	4.50
21	0.50	4.50
22	0.25	4.25
23	0.25	4.25
24	0.25	4.25
25 or more	0.00	4.00

7. Salary increase rates (continued):

Active Male and Female Members - Public Employees		
Years of Service	Annual Promotional/Longevity Rates of Increase	Total Annual Rate of Increase Including 3.00% Inflation Component and 1.00% General Increase Rate
0	5.50%	9.50%
1	4.75	8.75
2	3.50	7.50
3	3.00	7.00
4	2.50	6.50
5	2.25	6.25
6	2.00	6.00
7	1.75	5.75
8	1.50	5.50
9	1.50	5.50
10	1.25	5.25
11	1.00	5.00
12	1.00	5.00
13	1.00	5.00
14	0.75	4.75
15	0.75	4.75
16	0.75	4.75
17	0.50	4.50
18	0.50	4.50
19	0.50	4.50
20	0.25	4.25
21	0.25	4.25
22	0.25	4.25
23	0.25	4.25
24	0.25	4.25
25 or more	0.00	4.00

7. Salary increase rates (continued):

Active Male and Female Members Public Educators		
Years of Service	Annual Promotional/Longevity Rates of Increase	Total Annual Rate of Increase Including 3.00% Inflation Component and 1.00% General Increase Rate
0	8.00%	12.00%
1	6.25	10.25
2	5.00	9.00
3	4.75	8.75
4	4.50	8.50
5	4.00	8.00
6	3.75	7.75
7	3.50	7.50
8	3.25	7.25
9	3.00	7.00
10	2.50	6.50
11	2.00	6.00
12	1.75	5.75
13	1.25	5.25
14	1.00	5.00
15	0.75	4.75
16	0.75	4.75
17	0.75	4.75
18	0.75	4.75
19	0.50	4.50
20	0.50	4.50
21	0.50	4.50
22	0.50	4.50
23	0.50	4.50
24	0.25	4.25
25 or more	0.00	4.00

7. *Salary increase rates (continued):*

Active Male and Female Members Public Safety		
Years of Service	Annual Promotional/Longevity Rates of Increase	Total Annual Rate of Increase Including 3.00% Inflation Component and 1.00% General Increase Rate
0	5.75%	9.75%
1	4.00	8.00
2	3.75	7.75
3	3.25	7.25
4	3.00	7.00
5	2.75	6.75
6	2.75	6.75
7	2.75	6.75
8	2.50	6.50
9	2.50	6.50
10	2.25	6.25
11	2.00	6.00
12	1.75	5.75
13	1.50	5.50
14	1.25	5.25
15	1.25	5.25
16	1.00	5.00
17	1.00	5.00
18	1.00	5.00
19	1.00	5.00
20	1.00	5.00
21	0.75	4.75
22	0.50	4.50
23	0.50	4.50
24	0.25	4.25
25 or more	0.00	4.00



7. *Salary increase rates (continued):*

Active Male and Female Members Firefighters		
Years of Service	Annual Promotional/Longevity Rates of Increase	Total Annual Rate of Increase Including 3.00% Inflation Component and 1.00% General Increase Rate
0	6.25%	10.25%
1	5.75	9.75
2	5.50	9.50
3	5.25	9.25
4	5.00	9.00
5	4.75	8.75
6	4.50	8.50
7	4.25	8.25
8	4.00	8.00
9	3.50	7.50
10	3.00	7.00
11	2.50	6.50
12	2.25	6.25
13	2.00	6.00
14	1.75	5.75
15	1.75	5.75
16	1.50	5.50
17	1.50	5.50
18	1.25	5.25
19	1.00	5.00
20	0.75	4.75
21	0.75	4.75
22	0.50	4.50
23	0.00	4.00
24	0.00	4.00
25 or more	0.00	4.00

8. *Retiree mortality rates (nondisabled retirees):*

Retired Male Members			
Age	Local Government and Public Employees (80% of RP-2000 Males, combined)	Public Educators (Based on Plan Experience, Effective January 1, 2008)	Public Safety and Firefighters (80% of RP-2000 Males, combined)
20	.000276	.000436	.000276
25	.000301	.000569	.000301
30	.000355	.000690	.000355
35	.000618	.000732	.000618
40	.000863	.000922	.000863
45	.001206	.001358	.001206
50	.001710	.002218	.001710
55	.002899	.003806	.002899
60	.005398	.003581	.005398
65	.010190	.004568	.010190
70	.017765	.011982	.017765
75	.030267	.019933	.030267
80	.051494	.039454	.051494
85	.088606	.078258	.088606
90	.146726	.137016	.146726
95	.213993	.207802	.213993

Retired Female Members			
Age	Local Government and Public Employees (85% of RP-2000 Females, Combined)	Public Educators (Based on Plan Experience, Effective January 1, 2008)	Public Safety and Firefighters (85% of RP-2000 Females, combined)
20	.000162	.000274	.000162
25	.000176	.000282	.000176
30	.000224	.000339	.000224
35	.000404	.000463	.000404
40	.000600	.000687	.000600
45	.000955	.000941	.000955
50	.001425	.001382	.001425
55	.002309	.003391	.002309
60	.004297	.004245	.004297
65	.008250	.003924	.008250
70	.014231	.008067	.014231
75	.023890	.012800	.023890
80	.038997	.028558	.038997
85	.065829	.066564	.065829
90	.111930	.124727	.111930
95	.165333	.190840	.165333

9. *Disabled annuitant mortality rates:*

Disabled Retired Male and Female Members		
Age	Males	Females
20	.005542	.005542
25	.008296	.008296
30	.010472	.010472
35	.012724	.012724
40	.015079	.015079
45	.017867	.017867
50	.020808	.020808
55	.024429	.024429
60	.028441	.028441
65	.032563	.032563
70	.037842	.037842
75	.049113	.049113
80	.078574	.078574
85	.117699	.117699
90	.166583	.166583
95	.233894	.233894
100	.336796	.336796

10. *Actuarial cost method:*

The Entry Age Normal actuarial cost method is used. This method is designed to produce a relatively level funding pattern when expressed as a percent of pay.

First, the actuarial present value of all future expected benefits is determined for each member, including retired members, beneficiaries, inactive members and active members. This takes into account both the probability that a benefit will be paid at a given age and the time value of money. The sum of these amounts--the Present Value of Future Benefits (PVFB)--is then determined.

Next, the Entry Age Normal actuarial cost method is used to allocate the PVFB between the current year (the normal cost), prior years (the Actuarial Accrued Liability), and future years (future normal costs). The current and future normal costs are determined as a level percentage of pay, except that for the Legislators and Governors plan, which is not pay related, normal costs are determined as a level dollar amount.

A portion of the normal cost may be paid by employee contributions in which case the balance becomes the normal cost portion of the employer contribution rate.

The difference between the Actuarial Accrued Liability (the portion of the total actuarial present value of future benefits allocated to prior years) and the Actuarial Value of Assets is called the Unfunded Actuarial Accrued Liability (UAAL). This is funded over 25 years from January 1, 2009. (This period is closed, so that it will decrease by one in each subsequent valuation, until the period reaches 20 years, at which point the amortization period will revert to a 20-year open period, as was in effect prior to 2009. The funding period is set by the Board of Trustees.

The total employer cost rate is the sum of (i) the normal cost rate, net of employee contributions if applicable, and (ii) the level percent-of-pay amortization of the UAAL. For the Judges' System and the Firefighters' System, certain specified revenues (court fees and a tax on fire insurance premiums, respectively) are used as an offset to the employer contribution rate each year, as described elsewhere in this report.

All contribution rates are based upon monthly payments of contributions.

11. *Actuarial value of assets:*

The actuarial value of assets is equal to the market value, adjusted for a five-year phase in of actual investment return in excess of (or less than) expected investment return. The actual return is calculated net of investment and administrative expenses, and the expected investment return is equal to the assumed investment return rate multiplied by the prior year's market value of assets, adjusted for contributions, benefits paid, and refunds. The actuarial value of assets is further adjusted, if necessary, so that it is not less than 75% of market value and not more than 125% of market value.

12. *Payroll growth rate:*

In determining the level percent of payroll amortization rate, payroll is assumed to grow annually at 4.00%. No allowance is made for future growth in the number of members.

13. *Marital status:*

All nonretired members are assumed to be married with no children. Female members are assumed to be three years younger than their spouses, while male members are assumed to be three years older than their spouses.

14. *Administrative and investment expenses:*

No explicit assumption is made regarding administrative or investment expenses. The assumed 7.75% return is net of any such expenses.

15. *Judges System:*

For the Judges System, no disability or withdrawal rates were used. Salaries are assumed to increase at 4.00% per year.

16. *Governors and Legislative Pension Plan:*

A 10% withdrawal rate is assumed regardless of age or service. No disability rates are used. No salary increase rate is used because the benefits do not reflect pay. Members are assumed to retire at the earlier of (i) age 65 with four years of service, or (ii) age 62 with 10 years of service. Normal cost and actuarial accrued liability are based on Level Dollar Entry Age Cost Method (not Level Percent of Pay).

17. *Interest Credited on Member Contribution Account Balances:*

In projecting member contribution account balances, we assume that the rate credited is 7.75% each year. (The actual rate is set by the Board of Trustees annually, based on investment performance.) Interest is not credited to account balances for members of the Firefighters Retirement System.

18. *Cost-of-living increases:*

Since a 3.00% inflation rate is assumed (see investment return rate above), retirement benefits for all systems with a maximum 4% COLA are assumed to increase at 3.00% even though the maximum allowable rate is 4%. Retirement benefits for the funds in the Public Safety System with a maximum 2.5% COLA are assumed to increase at the maximum allowable rate of 2.50%.

Current retirees who have received cumulative COLAs less than the total of annual CPI increases since retirement, we assume higher COLAs, subject to the annual maximum, as long as the member has “banked” CPI increases left.

---

## **APPENDIX 2**

---

**SUMMARY OF BENEFIT PROVISIONS FOR  
PUBLIC EMPLOYEE RETIREMENT SYSTEMS  
(CONTRIBUTORY AND NONCONTRIBUTORY)**

1. *Effective Date:* Contributory System - July 1, 1961.  
Noncontributory System - July 1, 1986.
2. *Plan Year:* Twelve-month period ending December 31st.
3. *Administration:* The Systems are administered by a Board of Trustees (which also administers the other Utah Retirement Systems). The Board of Trustees is responsible for both administration of the Systems and investment of the fund assets.
4. *Type of Plan:* These are qualified governmental defined benefit retirement plans. Under GASB 25, they are considered to be cost-sharing multiple-employer plans.
5. *Eligibility:* These Systems cover eligible employees of the State of Utah, most local government employees, and most public education employees. Generally all employees are covered, except for those covered by another System--public safety employees, firefighters, judges, legislators, and higher education employees covered under TIAA-CREF. Eligible employees become participants immediately when hired, and are required to participate. The employer-selected plan determines whether new employees participate in the Contributory or Noncontributory System. Employees who were members of the Contributory System at the time their employer selected the Noncontributory System had an option to remain in the Contributory System.
6. *Employee Contributions:* Members of the Contributory System contribute 6.00% of salary per year. Employers may "pick-up" employee contributions under Section 414(h) of the Internal Revenue Code. No contributions are made by members of the Noncontributory System.
7. *Employer Contributions:* The current contribution rates differ between the Contributory and Noncontributory Systems, and also differ depending on whether the member is employed by a local government (Level B) or the State of Utah or a public school (Level A). Rates are set by the Board of Trustees, based upon the actuarial valuation report for the preceding year. The Funds participating in these systems are:
  - Fund 11 - Local Government Contributory
  - Fund 12 - State and School Contributory
  - Fund 15 - Local Government Noncontributory
  - Fund 16 - State and School Noncontributory
8. *Final Average Monthly Salary (FAMS):* The monthly average of the member's highest salaries preceding retirement. For the Contributory System a five-year average is used, while a three-year average is used for the Noncontributory System.

9. *Service Retirement (Unreduced):*

- a. Eligibility: A member may retire with an unreduced benefit at age 65 with four years of service or after 30 years of service if earlier.
- b. Monthly Benefit (Contributory): 2.00% times Final Average Monthly Salary (FAMS) times years of service earned since July 1, 1975, plus 1.25% of FAMS times service earned prior to July 1, 1975.
- c. Monthly Benefit (Noncontributory): 2.00% of Final Average Monthly Salary times years of service.
- d. Payment Form: Life annuity.

10. *Service Retirement (Reduced):*

- a. Eligibility: A member may retire with a reduced benefit upon attaining age 62 with 10 years of service or age 60 with 20 years of service. A member of the Noncontributory System may retire at any age after earning 25 years of service.
- b. Reduction: 3% per year that retirement is earlier than age 65. For Noncontributory System members retiring prior to age 60, actuarial reduction is applied to the 85% factor at age 60. The early retirement reduction factors are shown below:

Age	Factor	Age	Factor
64	97.00%	54	48.60%
63	94.00%	53	44.44%
62	91.00%	52	40.67%
61	88.00%	51	37.26%
60	85.00%	50	34.16%
59	77.20%	49	31.34%
58	70.21%	48	28.77%
57	63.93%	47	26.43%
56	58.28%	46	24.30%
55	53.19%	45	22.35%

- c. Payment Form: Life annuity.



11. *Disability Retirement:*

- a. Eligibility: Member must be eligible for retirement under the Disability Act and must not be eligible for a 30-year service retirement at time of disability.
- b. Monthly Benefits Payable Prior to Retirement: A separate fund established under the Disability Act provides benefits from the time of disability until the age specified in 49-21-403. Benefits from this separate fund are not covered by these Systems.
- c. Monthly Benefits Payable after Retirement: An unreduced service retirement benefit is payable. The member receives service credit for time while disabled (both for computing the benefit amount and for determining whether the member is eligible for an unreduced service retirement benefit). Final Average Monthly Salary is increased by the same factors used for automatic cost-of-living benefit increases. I.e., the FAMS is adjusted by a cost-of-living increase up to 4.0% per year (simple interest).
- d. Payment Form: Life annuity.
- e. Death while Disabled: A disabled member is treated as an active member for purposes of determining a death benefit for the period prior to retirement.

12. *Vesting and Refunds:*

- a. Eligibility: All members who are not vested are eligible for a refund when they terminate service. Members are vested after four years of service. Vested members may also elect to receive a refund in lieu of the deferred termination benefit described below. (Noncontributory System members hired after July 1, 1986, are ineligible for a refund.)
- b. Amount: The refund benefit is the accumulated value of the member's contributions plus interest credited by the fund. The amount of interest credited each year is set annually by the Board of Trustees.

13. *Deferred Termination Benefit:*

- a. Eligibility: Member must be vested (4 years of service) and must elect to leave his/her contributions on deposit.
- b. Monthly Benefit: Same as the unreduced or reduced service retirement benefit, based on service and FAMS at termination, and commencing once the member is eligible.
- c. Payment Form: Life annuity.
- d. Death Benefit: The beneficiary of an inactive member who dies is entitled to receive a refund benefit.

14. *Death while an Active Member:*
- a. In General: A refund of the member's accumulated contributions (with interest) is paid to the beneficiary of a deceased member.
  - b. Spousal Annuity: If the deceased member was married at the time of death and was either (i) eligible for reduced or unreduced service retirement, or (ii) had 25 years of service (15 years of service in the noncontributory system), the spouse may elect an annuity benefit in lieu of the refund benefit. The annuity is equal to the reduced or unreduced service retirement benefit payable as though Plan 3 (a Joint and 100% Survivor annuity) were elected. If the member had 25 years of service or more, no reduction factor is applied in determining the service retirement benefit. If a member of the noncontributory system is not eligible for a retirement benefit and has less than 25 years of service, then the death benefit is equal to 1/3 of Plan 3 benefit if the member has at least 15 and less than 20 years of service, and 2/3 of the Plan 3 benefit if the member has at least 20 and less than 25 years of service.
15. *Optional Forms of Benefit*: The Systems permit members to elect from six forms of benefit at retirement. In each case the benefit amount is adjusted to be actuarially equivalent to the "Plan 1" form. The six optional forms are:
- Plan 1 - A life annuity with no benefits due following the member's death.
- Plan 2 - Modified Cash Refund Annuity. A reduced annuity payable for the member's lifetime, plus a death benefit equal to the excess of the member's accumulated contributions (determined at retirement) over the sum of the member's annuity payments from retirement. (The annuity payments are that part of the original benefit derived from the member's own accumulated contributions.)
- Plan 3 - Joint and 100% Survivor Annuity. An annuity payable as long as either the member or his/her spouse is living.
- Plan 4 - Joint and 50% Survivor Annuity. An annuity payable during the member's lifetime, and after the member's death if the member's spouse is still living, an annuity to the spouse of 50% of the original benefit.
- Plan 5 - Joint and 100% Pop-up Annuity. Same as Plan 3, except that the benefit amount reverts to the Plan 1 (life annuity) amount if the member's spouse predeceases the member.
- Plan 6 - Joint and 50% Pop-up Annuity. Same as Plan 4, except that the benefit amount reverts to the Plan 1 (life annuity) amount if the member's spouse predeceases the member.

16. *Postretirement Death Benefit*: None, except as elected by the member. See Optional Forms of Benefit above.
17. *Postretirement Benefit Increases*: Benefits are increased annually to take into account changes in the cost of living, with a maximum annual increase of 4% of the original benefit (i.e., a maximum 4% simple interest increase). In years in which the cost of living increases more than 4%, the excess increase is accumulated and used in later years in which the cost-of-living increase is less than 4%. This calculation is made separately for each individual. In addition, a closed group of retirees also receives a second special increase amount paid as a level annuity under whichever form of payment was elected. This is the Restoration of Purchasing Power (ROPP) payment.
18. *3% Substantial Substitute*: All members whose service began before January 1, 1989, receive an additional annual payment equal to 3% of their benefit. These payments are made to offset the taxability of the retirement benefits under the State income tax provisions. Prior to July 1, 1995, this benefit was funded by annual appropriations made by the State on a pay-as-you go basis. Beginning July 1, 1995, this benefit is funded on an actuarial basis by increasing the employer contribution rate for those Funds which are funded by the State.

**SUMMARY OF BENEFIT PROVISIONS FOR  
PUBLIC SAFETY RETIREMENT SYSTEMS  
(CONTRIBUTORY AND NONCONTRIBUTORY)**

1. *Effective Date:* Contributory System - July 1, 1969.  
Noncontributory System - July 1, 1989.
2. *Plan Year:* Twelve-month period ending December 31st.
3. *Administration:* The Systems are administered by a Board of Trustees (which also administers the other Utah Retirement Systems). The Board of Trustees is responsible for both administration of the Systems and investment of the fund assets.
4. *Type of Plan:* These are qualified governmental defined benefit retirement plans. Under GASB 25, they are considered to be a combination of agent and cost-sharing multiple-employer plans.
5. *Eligibility:* These Systems cover eligible public safety employees of the State of Utah and some local governments. Eligible employees become participants immediately when hired, and are required to participate. The employer-selected plan determines whether new employees participate in the Contributory or Noncontributory System. Employees who were members of the Contributory System at the time their employer selected the Noncontributory System had an option to remain in the Contributory System.
6. *Employee Contributions:* Members of the Contributory System contribute a percentage of salary, as shown below. Employers may "pick-up" employee contributions under Section 414(h) of the Internal Revenue Code. No contributions are made by members of the Noncontributory System. Rates in the Contributory System vary by employer as follows:

Fund 22 - State of Utah	12.29%
Fund 23 - Other Division A (2.5% COLA)	12.29%
Fund 77 - Other Division A (4.0% COLA)	12.29%
Fund 27 - Logan	11.13%
Fund 29 - Other Division B (2.5% COLA)	10.50%
Fund 74 - Other Division B (4.0% COLA)	10.50%

7. *Employer Contributions:* The current contribution rates differ between the Contributory and Noncontributory Systems, and also differ depending on which fund (employer or group of employers) the member belongs to. Rates are set by the Board of Trustees, based upon the actuarial valuation report for the preceding year. The Funds included in these Systems are:

Contributory System

Fund 22 - State of Utah (Div A)  
Fund 23 - Other Division A (2.5% COLA)  
Fund 77 - Other Division A (4% COLA)  
Fund 27 - Logan (Div B)  
Fund 29 - Other Division B (2.5% COLA)  
Fund 74 - Other Division B (4% COLA)

Noncontributory System

Fund 42 - State of Utah (Div A)  
Fund 43 - Other Division A (2.5% COLA)  
Fund 75 - Other Division A (4% COLA election)  
Fund 44 - Salt Lake City (Div B)  
Fund 45 - Ogden (Div B)  
Fund 46 - Provo (Div B)  
Fund 47 - Logan (Div B)  
Fund 48 - Bountiful (Div A)  
Fund 49 - Other Division B (2.5% COLA)  
Fund 76 - Other Division B (4% COLA election)

The division designation (A or B) distinguishes between those employers covered by Social Security (A) and those not covered (B). Some plan provisions differ depending on the member's division.

8. *Final Average Monthly Salary (FAMS):* The monthly average of the member's highest three salaries preceding retirement.
9. *Service Retirement:*
- Eligibility: A member may retire with an unreduced benefit at age 65 with four years of service or at age 60 with 10 years of service or at any age with 20 years of service.
  - Monthly Benefit: 2.50% of Final Average Monthly Salary (FAMS) times years of service up to 20 years, plus 2.00% of FAMS times years of service in excess of 20. Benefits are limited to 70% of FAMS.
  - Payment Form: For married members benefits are paid as an automatic unreduced Joint and 65% Survivor Annuity. A life annuity is payable to unmarried members (although children's benefits may also be due following the member's death).

10. *Disability Retirement:*
- a. Eligibility: Member must be eligible for retirement under the Disability Act (or a substantially equivalent program) and must not be eligible for a 20-year service retirement at time of disability. Note that not all political subdivisions cover their members under a disability program.
  - b. Monthly Benefits Payable Prior to Retirement: A separate fund established under the Disability Act (or an equivalent program) provides benefits from the time of disability until the age specified in 49-21-403. Benefits from this separate fund are not covered by these Systems.
  - c. Monthly Benefits Payable after Retirement: An unreduced service retirement benefit is payable. The member receives service credit for time while disabled (both for computing the benefit amount and for determining whether the member is eligible for an unreduced service retirement benefit). Final Average Monthly Salary is increased by the same factors used for automatic cost-of-living benefit increases. I.e., the FAMS is adjusted by a cost-of-living increase up to 2.5% per year (simple interest).
  - d. Payment Form: Same as for Service Retirement.
  - e. Death while Disabled: A disabled member is treated as an active member for purposes of determining a death benefit for the period prior to retirement.
11. *Vesting and Refunds:*
- a. Eligibility: All members who are not vested are eligible for a refund when they terminate service. Members are vested after four years of service. Vested members may also elect to receive a refund in lieu of the deferred termination benefit described below. (Noncontributory System members hired after July 1, 1989, are ineligible for a refund.)
  - b. Amount: The refund benefit is the accumulated value of the member's contributions credited by the fund. Interest is credited on the member's contribution account, beginning July 1, 1996. The amount of interest credited each year is set annually by the Board of Trustees.
12. *Deferred Termination Benefit:*
- a. Eligibility: Member must be vested (4 years of service) and must elect to leave his/her contributions on deposit.
  - b. Monthly Benefit: Same as the service retirement benefit, based on service and FAMS at retirement, and commencing once the member is eligible.
  - c. Payment Form: Same as for service retirement.
  - d. Death Benefit: The beneficiary of an inactive member who dies is entitled to receive a refund benefit (or \$500 if larger). The spouse of an inactive member with 20 years of

service receives a monthly annuity equal to 50% of the service retirement benefit that would have been paid had the member died immediately prior to retirement. (An actuarial reduction factor is applied if the member was under age 50 at death.)

13. *Death while an Active Member (On Duty)*: If death occurs in the line of duty, the lump-sum and annuity benefits described below will be paid to the spouse. (The benefits are not applicable to unmarried members, although children's benefits may be due.)
  - a. Lump-sum (Division A members): \$1,000.
  - b. Annuity (Division A members): 30% of member's FAMS.\*
  - c. Lump-sum (Division B members): \$1,500.
  - d. Annuity (Division B members): 37.5% of member's FAMS.
  
14. *Death of an Active Member (Off Duty)*: If death occurs from a cause not related to the member's duties, the lump-sum and annuity benefits described below will be paid to the spouse. (The benefits are not applicable to unmarried members, although children's benefits may be due.)
  - a. Lump-sum (Division A members): If the member has less than 10 years of service, the benefit is \$1,000 or a refund benefit, whichever is larger. If the member has 10 or more years of service, the benefit is \$500.
  - b. Annuity (Division A members): If the member has less than 10 years of service, no annuity is due. For members with 10 or more years of service, the benefit is 2% of FAMS per year of service, to a maximum of 30% of FAMS.\*
  - c. Lump-sum (Division B members): If the member does not have two years of service, the benefit is the sum of 50% of the member's salary plus a refund benefit. If the member has two or more years of service, the benefit is \$1,500.
  - d. Annuity (Division B members): If the member has fewer than two years of service, no annuity is due. If the member has two or more years of service, the annuity is 37.5% of the member's FAMS.

\*(For members of the Noncontributory System, not less than the benefit payable to the surviving spouse if the member had retired the day before the member's date of death.)
  
15. *Optional Forms of Benefit*: Married members may elect an optional Joint & 75% Survivor option in lieu of the standard Joint & 65% option. The amount of the Joint & 75% Survivor option is determined actuarially.
  
16. *Postretirement Death Benefit*: None, except for survivor benefit applicable to married members.
  
17. *Postretirement Benefit Increases*: Benefits are increased annually to take into account changes in the cost of living. Most funds have a maximum annual increase of 2.50% of the

original benefit (i.e., a maximum 2.50% simple interest increase). A window was opened in 2008 to allow employers to make an election to provide a 4.00% maximum COLA. If elected, the 4.00% maximum applies to both current and future annuitants. The legislation opening the window mandated that the State public safety members would receive the 4.00% maximum COLA. The window was originally scheduled to close at the end of 2009, but it was extended in 2009 to December 2012.

In years in which the cost of living increases more than the maximum COLA, the excess increase is accumulated and used in later years in which the cost-of-living increase is less than the maximum COLA. This calculation is made separately for each individual. In addition, a closed group of retirees also receives a second special increase amount paid as a level annuity under whichever form of payment is applicable. This is the Restoration of Purchasing Power (ROPP) payment.

The table below shows which funds provide the 2.5% maximum COLA and which ones provide the 4.0% maximum COLA:

2.50% Maximum COLA

Funds 23 & 43 - Other Division A  
Fund 44 - Salt Lake City (Div B)  
Fund 45 - Ogden (Div B)  
Fund 46 - Provo (Div B)  
Funds 27 & 47 - Logan (Div B)  
Fund 48 - Bountiful (Div A)  
Funds 29 & 49 - Other Division B

4.00% Maximum COLA

Funds 22 & 42 - State of Utah (Div A)  
Funds 75 & 77- Other Division A  
Fund 74 & 76- Other Division B

18. *3% Substantial Substitute*: All members whose service began before January 1, 1989, receive an additional annual payment equal to 3% of their benefit. These payments are made to offset the taxability of the retirement benefits under the State income tax provisions. Prior to July 1, 1995, this benefit was funded by annual appropriations made by the State on a pay-as-you go basis. Beginning July 1, 1995, this benefit is funded on an actuarial basis by increasing the employer contribution rate for those Funds which are funded by the State.



### Summary of Benefit Provisions for Firefighters Retirement System

1. *Effective Date:* July 1, 1971.
2. *Plan Year:* Twelve-month period ending December 31st.
3. *Administration:* The System is administered by a Board of Trustees (which also administers the other Utah Retirement Systems). The Board of Trustees is responsible for both administration of the System and investment of the fund assets.
4. *Type of Plan:* This is a qualified governmental defined benefit retirement plan. Under GASB 25, it is considered to be a cost-sharing multiple-employer plan.
5. *Eligibility:* This System covers eligible firefighters employed by participating local governments in Utah. Eligible employees become participants immediately when hired, and are required to participate. Employers are designated as either Division A (employers with Social Security coverage) or Division B (employers without Social Security coverage). Benefit provisions and contribution rates differ for members of different divisions.
6. *Employee Contributions:* Members contribute a percentage of salary, as shown below. Employers may "pick-up" employee contributions under Section 414(h) of the Internal Revenue Code.

Fund 31 - Division A 15.05%  
Fund 32 - Division B 16.71%

Contribution rates shown may be reduced by expected income from a tax on fire insurance premiums.

7. The current employer contribution rates depend on the Fund. Division A covers employers covered by Social Security and Division B covers other employers. The contribution rates are set by the Board of Trustees, based on the actuarial valuation for the preceding year. Contribution rates are reduced by expected income from a tax on fire insurance premiums. The Funds in this System are:

Fund 31 - Division A  
Fund 32 - Division B

8. *Final Average Monthly Salary (FAMS):* The monthly average of the member's highest three salaries preceding retirement.

9. *Service Retirement:*

- a. Eligibility: A member may retire with an unreduced benefit at age 65 with four years of service or at age 60 with 10 years of service or at any age with 20 years of service.
- b. Monthly Benefit: 2.50% of Final Average Monthly Salary (FAMS) times years of service up to 20 years, plus 2.00% of FAMS times years of service in excess of 20. Benefits are limited to 70% of FAMS. There is a minimum benefit of \$500 per month.
- c. Payment Form: For married members benefits are paid as an automatic unreduced Joint and 75% Survivor Annuity. A life annuity is payable to unmarried members (although children's benefits may also be due following the member's death).

10. *Disability Retirement:*

- a. Eligibility: Member must have five or more years of service or the disability must be related to the member's duties. In addition, the member must not be eligible for a 20-year service retirement at time of disability.
- b. Monthly Benefits: 50% of FAMS.
- c. Payment Form: Benefits are payable as long as the member is disabled. Upon reaching 20 years of service, including time while disabled, or at age 65 if earlier, benefits are converted to a retirement benefit. There are special rules governing when benefits must be converted for members who become disabled after age 60.
- d. Death while Disabled: Upon the death of a disabled firefighter, the spouse shall receive 75% of the benefit currently being paid.

11. *Vesting and Refunds:*

- a. Eligibility: All members who are not vested are eligible for a refund when they terminate service. Members are vested after four years of service. Vested members may also elect to receive a refund in lieu of the deferred termination benefit described below.
- b. Amount: The refund benefit is the accumulated value of the member's contributions credited by the fund. Interest is not credited on member contributions.

12. *Deferred Termination Benefit:*

- a. Eligibility: Member must be vested (4 years of service) and must elect to leave his/her contributions on deposit.
- b. Monthly Benefit: Same as the service retirement benefit, based on service and FAMS at termination, and commencing once the member is eligible.
- c. Payment Form: Same as for service retirement.

- d. Death Benefit: The beneficiary of an unmarried inactive member who dies with 20 or more years of service prior to retirement is entitled to receive a refund benefit (or \$500 if larger). The spouse of an inactive member with 20 years of service receives a monthly annuity equal to 50% of the service retirement benefit that would have been paid had the member died immediately prior to retirement. (An actuarial reduction factor is applied if the member was under age 50 at death.) If the inactive member had less than 20 years of service, no death benefit is due.
13. *Death while an Active Member (On Duty)*: If death occurs in the line of duty, the lump-sum and annuity benefits described below will be paid to the spouse. (The benefits are not applicable to unmarried members, although children's benefits may be due.)
- a. Lump-sum (Division A members): \$1,500.
- b. Annuity (Division A members): 30% of member's FAMS. For members with more than 20 years of service, the annuity is 75% of the retirement benefit earned by the member as of his/her date of death.
- c. Lump-sum (Division B members): \$1,500.
- d. Annuity (Division B members): 37.5% of member's FAMS. For members with more than 20 years of service, the annuity is 75% of the retirement benefit earned by the member as of his/her date of death.
14. *Death of an Active Member (Off Duty)*: If death occurs from a cause not related to the member's duties, the lump-sum and annuity benefits described below will be paid to the spouse. (The benefits are not applicable to unmarried members, although children's benefits may be due.)
- a. Lump-sum (Division A members): If the member has less than 10 years of service, the benefit is \$1,000 or a refund benefit, whichever is larger. If the member has 10 or more years of service, the benefit is \$500.
- b. Annuity (Division A members): If the member has less than 10 years of service, no annuity is due. For members with 10 or more years of service, the benefit is 2% of FAMS per year of service, to a maximum of 30% of FAMS.
- c. Lump-sum (Division B members): If the member does not have five years of service, the benefit is the sum of 50% of the member's salary plus a refund benefit. If the member has five or more years of service, the benefit is \$1,500.
- d. Annuity (Division B members): If the member has fewer than five years of service, no annuity is due. If the member has five or more years of service, the annuity is 37.5% of the member's FAMS. For members with more than 20 years of service, the annuity is 75% of the retirement benefit earned by the member as of his/her date of death.

15. *Optional Forms of Benefit:* None.
16. *Postretirement Death Benefit:* None, except for survivor benefit applicable to married members.
17. *Postretirement Benefit Increases:* Benefits are increased annually to take into account changes in the cost of living, with a maximum annual increase of 4% of the original benefit (i.e., a maximum 4% simple interest increase). In years in which the cost of living increases more than 4%, the excess increase is accumulated and used in later years in which the cost-of-living increase is less than 4%. This calculation is made separately for each individual. In addition, a closed group of retirees also receives a second special increase amount paid as a level annuity under whichever form of payment is applicable. This is the Restoration of Purchasing Power (ROPP) payment.
18. *3% Substantial Substitute:* All members whose service began before January 1, 1989, receive an additional annual payment equal to 3% of their benefit. These payments are made to offset the taxability of the retirement benefits under the State income tax provisions. Prior to July 1, 1995, this benefit was funded by annual appropriations made by the State on a pay-as-you go basis. Beginning July 1, 1995, this benefit is funded on an actuarial basis by increasing the employer contribution rate for those Funds which are funded by the State.

**SUMMARY OF BENEFIT PROVISIONS FOR  
JUDGES' NONCONTRIBUTORY RETIREMENT SYSTEM**

1. *Effective Date:* July 1, 1963.
2. *Plan Year:* Twelve-month period ending December 31st.
3. *Administration:* The System is administered by a Board of Trustees (which also administers the other Utah Retirement Systems). The Board of Trustees is responsible for both administration of the System and investment of the fund assets.
4. *Type of Plan:* This is a qualified governmental defined benefit retirement plan. Under GASB 25, it is considered to be a single-employer plan.
5. *Eligibility:* This System covers judges of the State of Utah, including Supreme Court justices and appellate, district, circuit and juvenile court judges.
6. *Employee Contributions:* None. There are no longer any members in the Judges' Contributory Retirement System.
7. *Employer Contributions:* Fund 37 (Judges) has a contribution rate which is set by the Board of Trustees, based on the actuarial valuation for the preceding year. The rate is reduced by estimated court fees which are earmarked for this fund.
8. *Final Average Monthly Salary (FAMS):* The monthly average of the member's highest two salaries preceding retirement.
9. *Service Retirement (Unreduced):*
  - a. Eligibility: A member may retire with an unreduced benefit at age 70 with six years of service or after age 62 with 10 years of service or after 25 years of service.
  - b. Monthly Benefit: 5.00% times Final Average Monthly Salary (FAMS) times years of service up to 10, plus 2.25% of FAMS times years of service in excess of 10 but less than 20, plus 1.00% times FAMS times years of service in excess of 20. There is a maximum benefit of 75% of FAMS, and a minimum benefit equal to 110% of the formula benefit (but not greater than \$1,000 per month).
  - c. Payment Form: Married members receive an automatic, unreduced Joint and 65% Survivor annuity. Unmarried members receive a life annuity.

10. *Service Retirement (Reduced):*

- a. Eligibility: A member may retire with a reduced benefit upon attaining age 55 with 20 years of service.
- b. Reduction: An actuarial reduction from age 65. The reduction factors are shown in the following table:

Age	Factor	Age	Factor
64	89.92%	59	54.19%
63	81.00%	58	49.18%
62	73.09%	57	44.69%
61	66.05%	56	40.66%
60	59.78%	55	37.03%

- c. Payment Form: Same as for unreduced service retirement.

11. *Disability Retirement*: This System has no provisions applying to disability retirement.

12. *Vesting and Refunds*:

- a. Eligibility: All members who are not vested are eligible for a refund when they terminate service. Members are vested after six years of service. Vested members may also elect to receive a refund in lieu of the deferred termination benefit described below. (Although all judges are now members in the noncontributory system, some retain member contribution accounts from their participation in the Judges' Contributory Retirement System.)
- b. Amount: The refund benefit is the accumulated value of the member's contributions plus interest credited by the fund. The amount of interest credited each year is set annually by the Board of Trustees.

13. *Deferred Termination Benefit*:

- a. Eligibility: Member must be vested (6 years of service) and must elect to leave his/her contributions on deposit.
- b. Monthly Benefit: Same as the unreduced or reduced service retirement benefit, based on service and FAMS at termination, and commencing once the member is eligible.
- c. Payment Form: Same as for unreduced service retirement.
- d. Death Benefit: Same as for an active member.

14. *Death while an Active Member:* A refund of the member's accumulated contributions (with interest) is paid to the beneficiary of a deceased member. In addition, 65% of the member's FAMS (annualized) is paid to the spouse if the member was married. Alternatively, the spouse may waive these benefits and elect instead an annuity. The annuity is equal to 65% of the benefit determined using the unreduced service retirement formula, and based on current service and FAMS at the time of death.
15. *Optional Forms of Benefit:* The System permits married members to elect a reduced Joint and 75% Survivor annuity in lieu of the automatic Joint and 65% Survivor annuity. No other optional payment forms are available.
16. *Postretirement Death Benefit:* None, except for the Joint and Survivor annuities available to married members.
17. *Postretirement Benefit Increases:* Benefits are increased annually to take into account changes in the cost of living, with a maximum annual increase of 4% of the current benefit (i.e., a maximum 4% compound interest increase). In years in which the cost of living increases more than 4%, the excess increase is accumulated and used in later years in which the cost-of-living increase is less than 4%. This calculation is made separately for each individual. In addition, judges retired prior to July 1, 1983 received an increase of \$120 per month (\$60 for beneficiaries).
18. *3% Substantial Substitute:* All members whose service began before January 1, 1989, receive an additional annual payment equal to 3% of their benefit. These payments are made to offset the taxability of the retirement benefits under the State income tax provisions. Prior to July 1, 1995, this benefit was funded by annual appropriations made by the State on a pay-as-you go basis. Beginning July 1, 1995, this benefit is funded on an actuarial basis by increasing the employer contribution rate for those Funds which are funded by the State.

## SUMMARY OF BENEFIT PROVISIONS FOR THE GOVERNORS AND LEGISLATIVE PENSION PLAN

1. *Effective Date:* July 1, 1967.
2. *Plan Year:* Twelve-month period ending December 31st.
3. *Administration:* The System is administered by a Board of Trustees (which also administers the other Utah Retirement Systems). The Board of Trustees is responsible for both administration of the System and investment of the fund assets.
4. *Type of Plan:* This is a qualified governmental defined benefit retirement plan. Under GASB 25, it is considered to be a single-employer plan.
5. *Eligibility:* This System covers state legislators with four or more years of service, and governors of the state.
6. *Employee Contributions:* None.
7. *Employer Contributions:* The state annually appropriates an actuarially determined contribution.
8. *Benefit base:* The benefit base is used to determine the benefits payable at retirement.
  - a. Legislators: The base was \$10.00 per month per year of service as of July 1, 1967. The base is increased 2% each six months after that date. As of January 1, 2009, the benefit base is therefore \$26.60.
  - b. Governors: The base was \$500.00 per month per term as of July 1, 1973. The base is increased 2% each six months after that date. As of January 1, 2009, the benefit base is therefore \$1,210.00.
  - c. Supplemental Benefit: An additional benefit of \$3.50 per month per year of service. This benefit is not indexed nor are COLAs granted on it. This benefit only applies to members of the System on March 1, 2000 and is effective March 1, 2000.
9. *Service Retirement (Unreduced):*
  - a. Eligibility: Age 65.
  - b. Monthly Benefit: Legislators receive the benefit base (see above) per year of service, while former governors receive the benefit base (see above) for each term served (maximum of two terms).
  - c. Payment Form: For married members, a Joint and 50% Survivor annuity. For unmarried members, a life annuity.



10. *Service Retirement (Reduced):*
  - a. Eligibility: A member may retire with a reduced benefit upon attaining age 62 with 10 years of service.
  - b. Reduction: 3% per year that retirement is prior to age 65.
  - c. Payment Form: Same as for unreduced service retirement.
11. *Disability Retirement*: This System has no provisions applying to disability retirement.
12. *Vesting and Refunds*: A vested member who made contributions in another System and withdraws them forfeits all benefits under this System.
13. *Deferred Termination Benefit*:
  - a. Eligibility: Same as for reduced or unreduced service retirement. The member must not have withdrawn his/her contributions under another System.
  - b. Monthly Benefit: Same as the unreduced or reduced service retirement benefit, based on service at termination, and commencing once the member is eligible.
  - c. Payment Form: Same as for unreduced service retirement.
  - d. Death Benefit: Same as for an active member.
14. *Death while an Active Member*:
  - a. Eligibility: Four years of service as a legislator or governor.
  - b. Monthly Benefit: 50% of the unreduced service retirement benefit that the member would have been entitled to upon reaching age 65 based on the current benefit base. Benefit is paid to surviving spouse only.
15. *Optional Forms of Benefit*: None.
16. *Postretirement Death Benefit*: None, except for the Joint and Survivor annuity available to married members.
17. *Postretirement Benefit Increases*: Benefits are increased annually to take into account changes in the cost of living, with a maximum annual increase of 4% of the original benefit (i.e., a maximum 4% simple interest increase). In years in which the cost of living increases more than 4%, the excess increase is accumulated and used in later years in which the cost-of-living increase is less than 4%. This calculation is made separately for each individual. Note that the supplemental \$3.50 per month per year of service benefit is not eligible for these increases.

18. *3% Substantial Substitute*: All members whose service began before January 1, 1989, receive an additional annual payment equal to 3% of their benefit. These payments are made to offset the taxability of the retirement benefits under the State income tax provisions. Prior to July 1, 1995, this benefit was funded by annual appropriations made by the State on a pay-as-you go basis. Beginning July 1, 1995, this benefit is funded on an actuarial basis by increasing the employer contribution rate for those Funds which are funded by the State.